Quality Control And Detection Solution For Cell Therapy

Cell Therapy Innovation Inspired.

BlueKit™
Powered by Hillgene

Powered by Hillgene

CATALOG

01 Detection Kits for Plasmid 6

HG-HCP002-2G	*E.coli* HCP ELISA Detection Kit(2G)
HG-ED001	*E.coli* Residual DNA Detection Kit (qPCR)
HG-EF001	*E.coli* Residual DNA Fragment Analysis Detection Kit (qPCR)
HG-CL300	*E.coli* Residual Total RNA Sample Preprocessing Kit
HG-ER001	*E.coli* Residual Total RNA Detection Kit (RT-PCR)
HG-KA001	Kanamycin ELISA Detection Kit

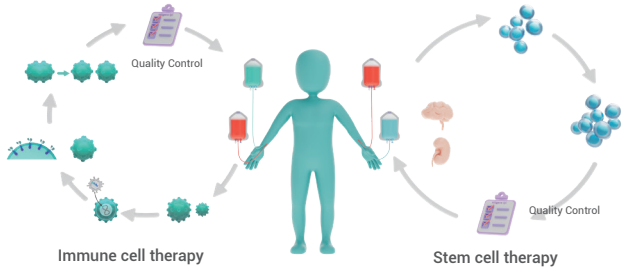
02 Detection Kits for Lentivirus 13

HG-CL100	Host Cell Residual DNA Sample Preprocessing Kit(Magnetic Bead Method)
HG-P001L	Lentivirus Titer p24 ELISA Detection Kit
HG-HCP001	293T HCP ELISA Detection Kit
HG-HD001	Human Residual DNA Detection Kit (qPCR)
HG-HF001	Human Residual DNA Fragment Analysis Detection Kit (qPCR)
HG-HR001	Human Residual RNA Detection Kit (RT-PCR)
HG-HD003	HEK293 Cell Residual DNA Detection Kit (qPCR)
HG-HF002	HEK293 Cell Residual DNA Fragment Analysis Detection Kit (qPCR)
HG-HD004	293T Cell Residual DNA Detection Kit (qPCR)
HG-HF003	293T Cell Residual DNA Fragment Analysis Detection Kit (qPCR)
HG-HD005	Hela Cell Residual DNA Detection Kit (qPCR)
HG-HF004	Hela Cell Residual DNA Fragment Analysis Detection Kit (qPCR)
HG-EA001	E1A&SV40LTA Residual DNA Detection Kit (Multiplex qPCR)
HG-EA002	E1A Residual DNA Detection Kit (qPCR)
HG-BE001	Nuclease ELISA Detection Kit
HG-ZL001	Plasmid Residual DNA Detection Kit (qPCR)
HG-ZL002	Plasmid Residual DNA (Kanamycin Resistance Gene) Detection Kit (qPCR)
HG-BS001	BSA ELISA Detection Kit
HG-TR001	Trypsin ELISA Detection Kit
HG-BC001	BCA Rapid Protein Quantitative Detection Kit
HG-PG001	PG13 Residual DNA Detection Kit (qPCR)

Quality Control And Detection Solution For Cell Therapy

Cell Therapy

The production process of cellular drugs represented by CAR-T involves three differentobjects: plasmid, virus and cell. Their culture, purification, detection and other processesare different, which has high requirements for the quality control of cellular drugs. Inthe process of cell drug production, it is necessary to detect impurities, safety, content/potency, identification/physical chemistry and other indicators. In response to therequirements of cell drug production and quality release, Hillgene has developed a kitto detect biological residues and biological functions in the production process of celldrugs, helping to control the quality of cell drug production.



Cell therapy process

CAR-T Quality Control Detection Kit

Plasmid

E.coli HCP ELISA Detection Kit
E.coli Residual DNA Detection Kit (qPCR)
E.coli Residual Total RNA Sample Preprocessing Kit
E.coli Residual Total RNA Detection Kit (RT-PCR)
Kanamycin ELISA Detection Kit)

Lentivirus

Host Cell Residual DNA Sample Preprocessing Kit
Lentivirus Titer p24 ELISA Detection Kit
293T HCP ELISA Detection Kit
Human Residual DNA Detection Kit (qPCR)
Human Residual RNA Detection Kit (RT-PCR)
Human Residual DNA Fragment Analysis Detection Kit (qPCR)
E1A&SV40LTA Residual DNA Detection Kit (Multiplex qPCR)
Nuclease ELISA Detection Kit
Plasmid Residual DNA Detection Kit (qPCR)
BSA ELISA Detection Kit
Trypsin ELISA Detection Kit
BCA Rapid Protein Quantitative Detection Kit

Cell

Blood/Tissue/Cell Genomic DNA Extraction Kit
CAR/TCR Gene Copy Number Detection Kit (Multiplex qPCR)
RCL(VSVG) Gene Copy Number Detection Kit (qPCR)
BaEV Gene Copy Number Detection Kit (qPCR)
Mycoplasma DNA Sample Preprocessing Kit
Mycoplasma DNA Detection Kit (qPCR)-ZY001
Mycoplasma DNA Detection Kit (qPCR)-ZY002
CRS Cytokine Multiplex ELISA Detection Kit
HIV-1 p24 ELISA Detection Kit
Cell Residual Human IL-2 ELISA Detection Kit
Cell Residual Human IL-7 ELISA Detection Kit
Cell Residual Human IL-15 ELISA Detection Kit
Cell Residual Human IL-21 ELISA Detection Kit
Human IFN-γ ELISA Detection Kit

CAR-NK Quality Control Detection Kit

Plasmid

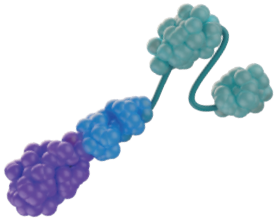
E.coli HCP ELISA Detection Kit
E.coli Residual DNA Detection Kit (qPCR)
E.coli Residual Total RNA Sample Preprocessing Kit
E.coli Residual Total RNA Detection Kit (RT-PCR)
Kanamycin ELISA Detection Kit

Lentivirus

Host Cell Residual DNA Sample Preprocessing Kit
Lentivirus Titer p24 ELISA Detection Kit
293T HCP ELISA Detection Kit
Human Residual DNA Detection Kit (qPCR)
Human Residual RNA Detection Kit (RT-PCR)
Human Residual DNA Fragment Analysis Detection Kit (qPCR)
E1A&SV40LTA Residual DNA Detection Kit (Multiplex qPCR)
Nuclease ELISA Detection Kit
Plasmid Residual DNA Detection Kit (qPCR)
BSA ELISA Detection Kit
Trypsin ELISA Detection Kit
BCA Rapid Protein Quantitative Detection Kit

Cell

Blood/Tissue/Cell Genomic DNA Extraction Kit
CAR/TCR Gene Copy Number Detection Kit (Multiplex qPCR)
Mycoplasma DNA Sample Preprocessing Kit
Mycoplasma DNA Detection Kit (qPCR)-ZY001
Mycoplasma DNA Detection Kit (qPCR)-ZY002
CRS Cytokine Multiplex ELISA Detection Kit
HIV-1 p24 ELISA Detection Kitt
Cell Residual Human IL-2 ELISA Detection Kit
Cell Residual Human IL-7 ELISA Detection Kit
Cell Residual Human IL-15 ELISA Detection Kit
Cell Residual Human IL-21 ELISA Detection Kit
Human IFN-γ ELISA Detection Kit



TCR-T Quality Control Detection Kit

Plasmid

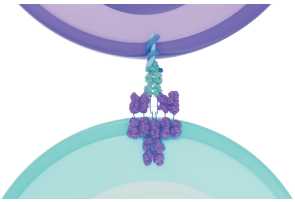
E.coli HCP ELISA Detection Kit
E.coli Residual DNA Detection Kit (qPCR)
E.coli Residual Total RNA Sample Preprocessing Kit
E.coli Residual Total RNA Detection Kit (RT-PCR)
Kanamycin ELISA Detection Kit

Lentivirus

Host Cell Residual DNA Sample Preprocessing Kit
Lentivirus Titer p24 ELISA Detection Kit
293T HCP ELISA Detection Kit
Human Residual DNA Detection Kit (qPCR)
Human Residual RNA Detection Kit (RT-PCR)
Human Residual DNA Fragment Analysis Detection Kit
E1A&SV40LTA Residual DNA Detection Kit
Nuclease ELISA Detection Kit
Plasmid Residual DNA Detection Kit (qPCR)
BSA ELISA Detection Kit
Trypsin ELISA Detection Kit
BCA Rapid Protein Quantitative Detection Kit

Cell

Blood/Tissue/Cell Genomic DNA Extraction Kit
CAR/TCR Gene Copy Number Detection Kit (Multiplex qPCR)
BaEV Gene Copy Number Detection Kit (qPCR)
RCL(VSVG) Gene Copy Number Detection Kit (qPCR)
Mycoplasma DNA Sample Preprocessing Kit
Mycoplasma DNA Detection Kit (qPCR)-ZY001
Mycoplasma DNA Detection Kit (qPCR)-ZY002
CRS Cytokine Multiplex ELISA Detection Kit
HIV-1 p24 ELISA Detection Kit
Cell Residual Human IL-2 ELISA Detection Kit
Cell Residual Human IL-7 ELISA Detection Kit
Cell Residual Human IL-15 ELISA Detection Kit
Cell Residual Human IL-21 ELISA Detection Kit
Human IFN-γ ELISA Detection Kit



01 Detection Kits for Plasmid

E.coli HCP ELISA Detection Kit(2G)

E.coli Residual DNA Detection Kit (qPCR)

E.coli Residual DNA Fragment Analysis Detection Kit (qPCR)

E.coli Residual Total RNA Sample Preprocessing Kit

E.coli Residual Total RNA Detection Kit (RT-PCR)

Kanamycin ELISA Detection KitE.coli Residual Total RNA Sample Preprocessing Kit

E.coli HCP ELISA Detection Kit(2G)

Overview

Cat.No. HG-HCP002-2G

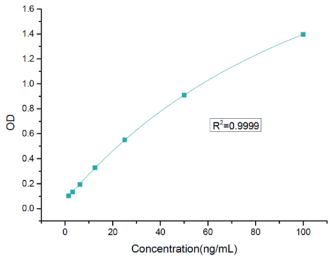
This kit is designed for the quantitative detection of HCP (host cell protein) content in biopharmaceuticals expressed on E.coli by using a double-antibody sandwich method.

This kit can be used to detect all components of HCP (host cell protein) in E.coli.

Specification

Assay range: 1.5625 - 100g/mL
Limit of quantitation: 1 ng/mL
Limit of detection: 0.3 ng/mL
Precision: CV%≤10%, RE%≤±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value	CV(%)	Detection value (ng/mL)	Recovery rate
100	1.38430	1.41080	1.39755	2	100.06497	100
50	0.90180	0.91590	0.90885	2	49.87385	100
25	0.54860	0.55260	0.55060	1	25.09237	100
12.5	0.32590	0.32790	0.32690	1	12.64237	101
6.25	0.19510	0.19310	0.19410	1	6.00335	96
3.125	0.13490	0.13270	0.13380	2	3.11057	100
1.5625	0.10600	0.09870	0.10235	6	1.61054	103
0	0.0694	0.07	0.0697	4	0	/

E.coli Residual DNA Detection Kit (qPCR)

Overview

Cat.No. HG-ED001

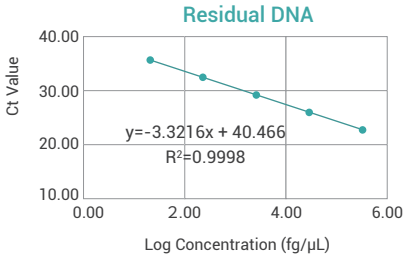
This kit is designed for the quantitative detection of E.coli host cell DNA in intermediates, semi-finished products and finished products of various biological products.

This kit adopts the principle of Taqman probe to quantitatively detect E.coli residual DNA in samples. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: 3.00×10^{1} ~3.00×10^{5} fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Limit of detection: 3.00 fg/μL
Precision: CV%≤15%

Standard curve



Datasheet

Concentration (fg/μL)	Log Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
3.00E+05	5.48	22.30	22.33	22.32	22.32	97%
3.00E+04	4.48	25.51	25.43	25.49	25.48	108%
3.00E+03	3.48	29.09	28.89	28.90	28.96	97%
3.00E+02	2.48	32.38	32.30	32.72	32.32	95%
3.00E+01	1.48	35.52	35.28	35.72	35.51	104%
Amplification efficiency						100.01%

E.coli Residual DNA Fragment Analysis Detection Kit (qPCR)

Cat.No. HG-EF001

Overview

Based on fluorescent probe method, this kit quantitatively detects fragments of E.coli residual DNA with sizes of 62bp, 141bp, 284bp, and 517bp, respectively, covering the possible functional gene sizes to the greatest extent, with the sensitivity up to 3fg/μL, and can accurately quantify the residual amount and distribution of each fragment of E. coli DNA.The kit is equipped with the sample preprocessing kit of our company (Cat. No.: HG-CL100) for sample preprocessing.

Specification

Assay range: 3.00×10^{1}~3.00×10^{5} fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Residual DNA fragment (⩾ 62bp) Detection

Standard		Target gene copy number standard curve (FAM)			
Concentration (fg/μL)	Log10 Concentration	Ct Value 1	Ct Value 2	Ct Value 3	CV %
3.00E+05	5.48	15.809	15.717	15.76	0.41%
3.00E+04	4.48	19.311	19.166	19.24	0.54%
3.00E+03	3.48	22.547	22.666	22.61	0.37%
3.00E+02	2.48	26.056	26.120	26.09	0.17%
3.00E+01	1.48	29.472	29.639	29.56	0.40%
3.00	0.48	32.509	32.810	32.66	0.65%
Amplification efficiency				97.43%	

Residual DNA fragment (⩾ 141bp) Detection

Standard		Target gene copy number standard curve (FAM)			
Concentration (fg/μL)	Log10 Concentration	Ct Value 1	Ct Value 2	Ct Value 3	CV %
3.00E+05	5.48	17.282	17.331	17.31	0.20%
3.00E+04	4.48	20.748	20.806	20.78	0.20%
3.00E+03	3.48	24.205	24.215	24.21	0.03%
3.00E+02	2.48	27.496	27.627	27.56	0.34%
3.00E+01	1.48	30.813	31.106	30.96	0.67%
3.00	0.48	34.156	34.068	34.11	0.18%
Amplification efficiency				97.71%	

Residual DNA fragment (⩾ 284bp) Detection

Standard		Target gene copy number standard curve (FAM)			
Concentration (fg/μL)	Log10 Concentration	Ct Value 1	Ct Value 2	Ct Value 3	CV %
3.00E+05	5.48	17.707	17.800	17.75	0.37%
3.00E+04	4.48	21.054	21.068	21.06	0.05%
3.00E+03	3.48	24.385	24.561	24.47	0.51%
3.00E+02	2.48	27.896	27.939	27.92	0.11%
3.00E+01	1.48	30.970	31.011	30.99	0.09%
3.00	0.48	34.534	34.461	34.50	0.15%
Amplification efficiency				99.57%	

Residual DNA fragment (⩾ 517bp) Detection

Standard		Target gene copy number standard curve (FAM)			
Concentration (fg/μL)	Log10 Concentration	Ct Value 1	Ct Value 2	Ct Value 3	CV %
3.00E+05	5.48	17.707	17.800	17.75	0.37%
3.00E+04	4.48	21.054	21.068	21.06	0.05%
3.00E+03	3.48	24.385	24.561	24.47	0.51%
3.00E+02	2.48	27.896	27.939	27.92	0.11%
3.00E+01	1.48	30.970	31.011	30.99	0.09%
3.00	0.48	34.534	34.461	34.50	0.15%
Amplification efficiency				93.72%	

E.coli Residual Total RNA Sample Preprocessing Kit

Overview

Cat.No. HG-CL300

E.coli Residual Total RNA Sample Preprocessing Kit is a dedicated kit for processing E.coli Residual Total RNA detection samples.

E.coli Residual Total RNA Detection Kit (RT-PCR)

Overview

Cat.No. HG-ER001

This kit is designed for the quantitative detection of residual E.coli total RNA in various biological products to improve control quality of nucleic acid.

This kit adopts the principle of the RT-PCR fluorescent probe, combining reverse transcription PCR technology and fluorescent probe method, to realize one-step quantitative detection.

Specification

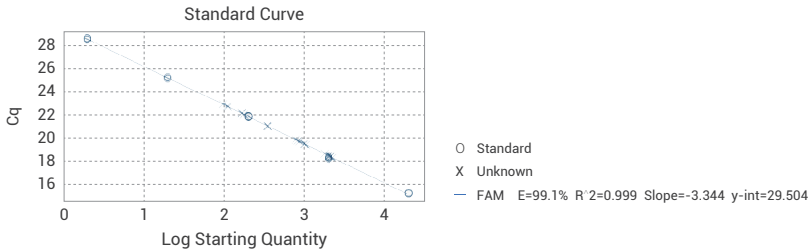
Assay range: 2.00~2.00×10^4 fg/μL

Limit of quantitation: 2.00 fg/μL

Limit of detection: 0.50 fg/μL

Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log_{10} Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
2.00E+04	4.30	15.30	15.23	15.21	15.24	0.30%
2.00E+03	3.30	18.39	18.28	18.18	18.28	0.56%
2.00E+02	2.30	21.86	21.82	21.78	21.82	0.18%
2.00E+01	1.30	25.22	25.22	25.09	25.18	0.31%
2.00E+00	0.30	28.55	28.58	28.43	28.52	0.29%
Amplification efficiency						99.1%

Kanamycin ELISA Detection Kit

Overview

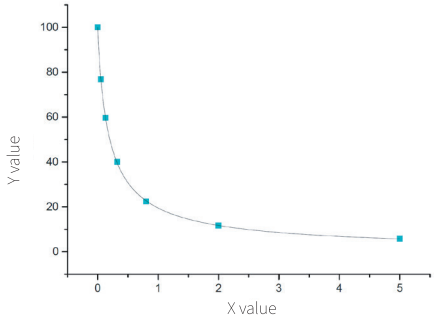
Cat.No. HG-KA001

BlueKit series Kanamycin ELISA Detection Kit is a specialized kit for quantitative detection of residual kanamycin content in drug substance, intermediates, and drug products of cell and gene therapy drugs.

Specification

Assay range: 0.05~5.00 ng/mL
Limit of quantitation: 0.05 ng/mL
Limit of detection: 0.05 ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Standard Curve (ng/mL)	Percent Absorbance (%)
5	5.9
2	11.66
0.8	22.42
0.32	40.05
0.128	59.63
0.0512	76.89
0	100.00

02 Detection Kits for Lentivirus

Host Cell Residual DNA Sample Preprocessing Kit(Magnetic Bead Method)
Lentivirus Titer p24 ELISA Detection Kit
293T HCP ELISA Detection Kit
Human Residual DNA Detection Kit (qPCR)
Human Residual DNA Fragment Analysis Detection Kit (qPCR)
Human Residual RNA Detection Kit (RT-PCR)
HEK293 Cell Residual DNA Detection Kit (qPCR)
HEK293 Cell Residual DNA Fragment Analysis Detection Kit (qPCR)
293T Cell Residual DNA Detection Kit (qPCR)
293T Cell Residual DNA Fragment Analysis Detection Kit (qPCR)
Hela Cell Residual DNA Detection Kit (qPCR)
Hela Cell Residual DNA Fragment Analysis Detection Kit (qPCR)
E1A&SV40LTA Residual DNA Detection Kit (Multiplex qPCR)
E1A Residual DNA Detection Kit (qPCR)
Nuclease ELISA Detection Kit
Plasmid Residual DNA Detection Kit (qPCR)
Plasmid Residual DNA (Kanamycin Resistance Gene) Detection Kit (qPCR)
BSA ELISA Detection Kit
Trypsin ELISA Detection Kit
BCA Rapid Protein Quantitative Detection Kit
PG13 Residual DNA Detection Kit (qPCR)

Host Cell Residual DNA Sample Preprocessing Kit (Magnetic Bead Method)

Overview

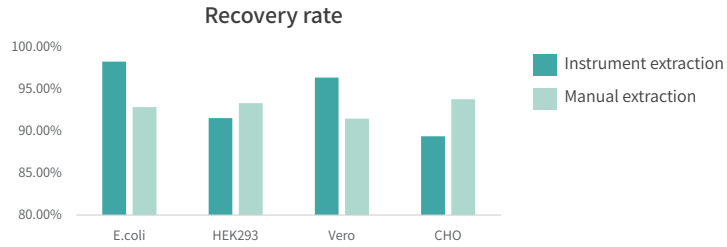
Cat.No. HG-CL100

The residual DNA of host cells in biological products has many risks such as tumorigenicity and infectivity, so the accurate quantitative detection of trace amounts of residual DNA is particularly important. Pretreatment is the process of extracting and purifying trace amounts of DNA in biological products from complex sample matrices. An effective and stable pretreatment method is the basis for ensuring accurate detection of residual DNA detection and other rapid nucleic acid detection methods. BlueKit™ Host Cell Residual DNA Sample Preprocessing Kit can meet both manual extraction and machine extraction methods. Manual extraction is accurate and sensitive, and it is efficient and convenient to use with a fully automatic nucleic acid extractor.

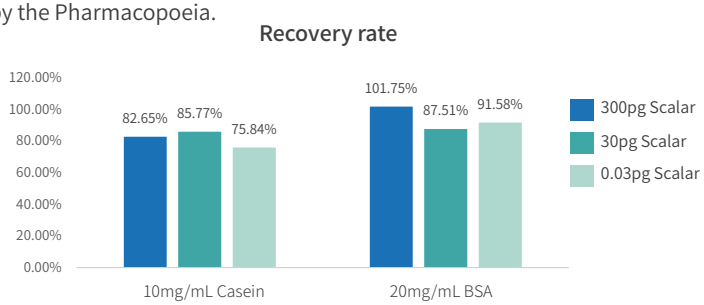
Specification

Detection sensitivity: 0.03pg/μL
Recovery rate: 70%~130%

Data



Manual extraction and instrument extraction were performed on DNA samples of different host types, and the final sample recovery rates were 70% to 130%, which were better than the 50% to 150% required by the Pharmacopoeia.



The two sample matrices (PBS+10mg/mL BSA and PBS+10mg/mL casein) were added with a total of 0.03pg, 3pg, and 300pg of gDNA reference substance for pretreatment, and the final recovery of the standard addition was 70 %~130%.

Lentivirus Titer p24 ELISA Detection Kit

Overview

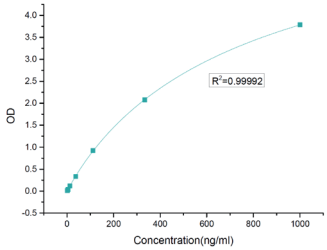
Cat.No. HG-P001L

This product uses a double antibody sandwich method to detect HIV 1 p24 protein in samples. A monoclonal antibody specific to HIV 1 p24 antigen is coated on a microplate, and the standard or test sample is added into the reaction well. At the same time, th e anti HIV 1 p24 secondary antibody is added and incubated at room temperature to form the antibody antigen secondary antibody complex. The unconjugated compounds are removed by washing and protein content in the sample is indicated by the intensity of TMB color development.

Specification

Assay range: 1.37-1000 ng/mL
Detection sensitivity: 0.35 ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
1000.00	3.8020	3.7780	3.790
333.33	2.1020	2.0660	2.084
111.11	0.9526	0.9072	0.930
37.04	0.3212	0.3512	0.336
12.35	0.1222	0.1243	0.123
4.12	0.0403	0.0459	0.043
1.37	0.0174	0.0177	0.018
0.00	0.0059	0.0058	0.006

293T HCP ELISA Detection Kit

Overview

Cat.No. HG-HCP001

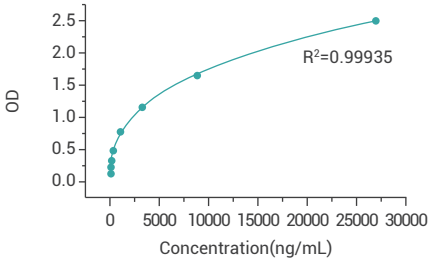
This kit is designed for the quantitative detection of HCP (host cell protein) content in biopharmaceuticals expressed on 293T cells by using a double-antibody sandwich method.

This kit can be used to detect all components of HCP (host cell protein) in 293T cell.

Specification

Assay range: 37-27000 ng/mL
Limit of quantitation: 37ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
27000	2.507	2.494	2.5005
9000	1.618	1.625	1.6215
3000	1.176	1.181	1.1785
1000	0.773	0.77	0.7715
333	0.496	0.475	0.4855
111	0.289	0.285	0.287
37	0.205	0.195	0.2
0	0.14	0.137	0.1385

Human Residual DNA Detection Kit (qPCR)

Overview

Cat.No. HG-HD001

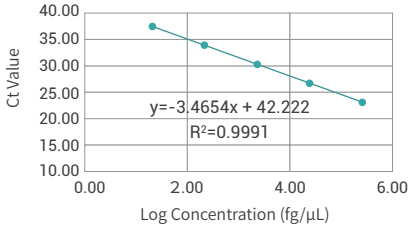
This kit is designed for the quantitative detection of the Human host cell DNA in intermediate, semi-finished and finished products of various biological products.

This kit adopts the principle of the Taqman probe to quantitatively detect Human residual DNA in samples. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: 3.00×10^{1}~3.00×10^{5}fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
3.00E+05	5.48	23.52	23.37	23.39	23.43	88%
3.00E+04	4.48	26.64	26.55	26.45	26.54	111%
3.00E+03	3.48	30.16	30.07	30.06	30.09	105%
3.00E+02	2.48	33.75	33.33	33.52	33.53	107%
3.00E+01	1.48	38.3	36.49	36.90	37.26	90%
Amplification efficiency						94.34%

Human Residual DNA Fragment Analysis Detection Kit (qPCR)

Overview

Cat.No. HG-HF001

This kit is designed for the quantitative detection of the size distribution of Human residual host cell DNA fragments in intermediates, semi-finished and finished products of various biological products.

This kit adopts the principle of PCR fluorescent probe method to quantitatively detect the size distribution of human residual host cell DNA fragments in the sample. The kit features three different amplified fragments (99 bp, 200 bp and 307 bp), and the Human DNA quantification reference is used to make standard curves for different amplified fragments respectively, and the fragment distribution of Human residual DNA in the sample is analyzed through the ratio of different sizes of fragments.

This kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

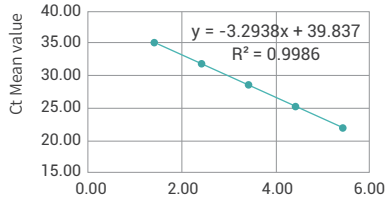
Specification

Assay range: 3.00×10^{1}~3.00×10^{5} fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Residual DNA fragment (⩾ 99bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	21.66	21.66	22.96	22.80
3.00E+04	4.48	25.06	25.06	22.67	
3.00E+03	3.48	28.61	28.61	22.81	
3.00E+02	2.48	31.85	31.85	22.70	
3.00E+01	1.48	34.74	34.74	22.86	
Amplification efficiency				101.19%	

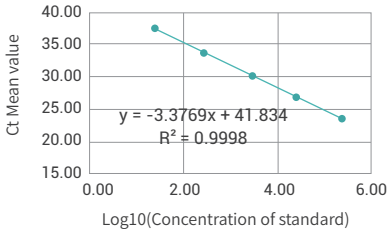
Residual DNA fragment (⩾ 99bp) Standard curve



Residual DNA fragment (⩾ 200bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.23	23.23	23.09	23.06
3.00E+04	4.48	26.80	26.80	23.08	
3.00E+03	3.48	30.16	30.16	22.99	
3.00E+02	2.48	33.49	33.49	23.13	
3.00E+01	1.48	36.77	36.77	23.00	
Amplification efficiency				97.76%	

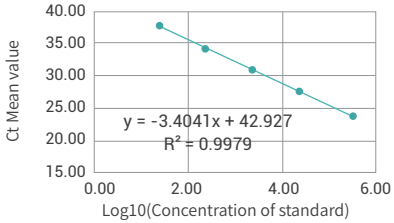
Residual DNA fragment (⩾ 200bp) Standard curve



Residual DNA fragment (⩾ 307bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.98	23.98	23.00	22.99
3.00E+04	4.48	27.98	27.98	22.99	
3.00E+03	3.48	31.31	31.31	23.04	
3.00E+02	2.48	34.40	34.40	22.88	
3.00E+01	1.48	37.79	37.79	23.02	
Amplification efficiency				96.68%	

Residual DNA fragment (⩾ 307bp) Standard curve



Human Residual RNA Detection Kit (RT-PCR)

Overview

Cat.No. HG-HR001

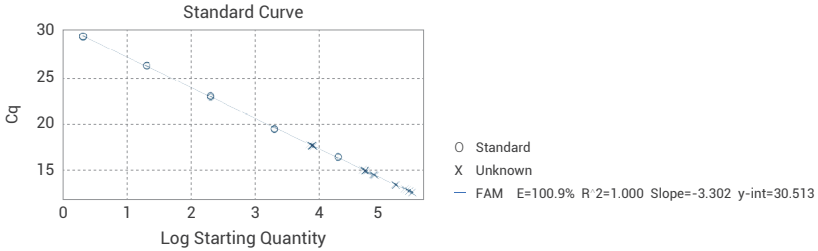
This kit is designed for the quantitative detection of residual Human total RNA in various biological products to improve control quality of nucleic acid.

This kit adopts the principle of the RT-PCR fluorescent probe, combining reverse transcription PCR technology and fluorescent probe method, to realize one-step quantitative detection.

Specification

Assay range: 2.00~2.00×10^4 fg/μL
Limit of quantitation: 2.00 fg/μL
Limit of detection: 0.50 fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
2.00E+04	4.30	16.45	16.37	16.36	16.39	0.30%
2.00E+03	3.30	19.41	19.51	19.44	19.46	0.26%
2.00E+02	2.30	23.03	22.83	22.98	22.95	0.45%
2.00E+01	1.30	26.31	26.33	26.26	26.30	0.12%
2.00E+00	0.30	29.53	29.48	29.42	29.48	0.19%
Amplification efficiency						100.9%

HEK293 Cell Residual DNA Detection Kit (qPCR)

Overview

Cat.No. HG-HD003

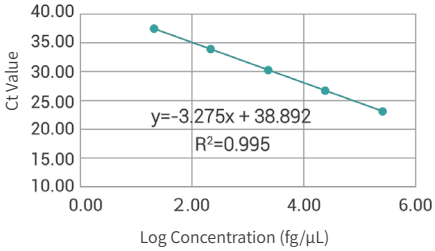
HEK293 Cell residual DNA detection kit is a kit specially designed for quantitative detection of HEK293 Cell DNA in intermediate products, bulk products and final products of various biological products.

This kit quantitatively detects HEK293 Cell residual DNA in samples based on Taqman probe principle. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: 3.00×10^{1}~3.00×10^{5}fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
3.00E+05	5.48	23.48	23.72	23.51	23.57	94%
3.00E+04	4.48	26.62	26.49	26.53	26.55	109%
3.00E+03	3.48	30.06	30.12	30.21	30.13	99%
3.00E+02	2.48	33.56	33.43	33.49	33.49	96%
3.00E+01	1.48	36.67	36.51	36.78	36.65	101%
Amplification efficiency						98.08%

HEK293 Cell Residual DNA Fragment Analysis Detection Kit (qPCR)

Overview

Cat.No. HG-HF002

This kit is a kit specially designed for quantitative detection of the size distribution of residual HEK293 Cell DNA fragments in intermediates, bulk products and final products of various biological products.

This kit is based on the principle of PCR fluorescence probe method to quantitatively detect the size distribution of residual HEK293 Cell DNA fragments in samples. This kit designs three different amplified fragments (99 bp, 200 bp and 307 bp). The HEK293 Cell DNA quantitative reference is used to generate standard curves for different amplified fragments, and the fragment distribution of residual HEK293 Cell DNA in samples is analyzed by the ratio of different size fragments.

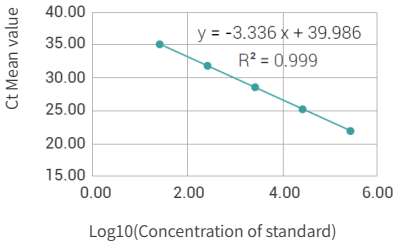
Specification

Assay range: 3.00×10^{1}~3.00×10^{5} fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Residual DNA fragment (⩾ 99bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	21.83	21.83	22.98	22.77
3.00E+04	4.48	24.97	24.97	22.59	
3.00E+03	3.48	28.59	28.59	22.76	
3.00E+02	2.48	32.01	32.01	22.69	
3.00E+01	1.48	34.83	34.83	22.81	
Amplification efficiency				101.19%	

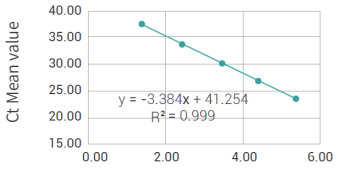
Residual DNA fragment (⩾ 99bp) Standard curve



Residual DNA fragment (⩾ 200bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.31	23.31	23.12	23.04
3.00E+04	4.48	26.68	26.68	23.06	
3.00E+03	3.48	30.09	30.09	22.94	
3.00E+02	2.48	33.27	33.27	23.13	
3.00E+01	1.48	35.98	35.98	22.97	
Amplification efficiency				98.67%	

Residual DNA fragment (⩾ 200bp) Standard curve

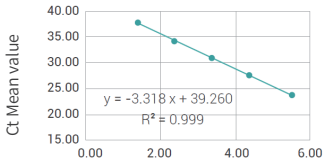


Log10(Concentration of standard)

Residual DNA fragment (⩾ 307bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.92	23.92	23.04	22.99
3.00E+04	4.48	27.65	27.65	23.01	
3.00E+03	3.48	31.29	31.29	22.98	
3.00E+02	2.48	34.06	34.06	22.89	
3.00E+01	1.48	37.28	37.28	23.1	
Amplification efficiency				97.06%	

Residual DNA fragment (⩾ 307bp) Standard curve



Log10(Concentration of standard)

293T Cell Residual DNA Detection Kit (qPCR)

Overview

Cat.No. HG-HD004

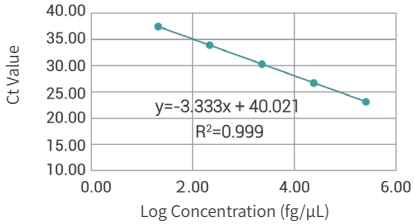
293T Cell residual DNA detection kit is a kit specially designed for quantitative detection of 293T Cell DNA in intermediate products, bulk products and final products of various biological products.

This kit quantitatively detects 293T Cell residual DNA in samples based on Taqman probe principle. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: 3.00×10^{1}~3.00×10^{5}fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
3.00E+05	5.48	23.64	23.71	23.59	23.65	92%
3.00E+04	4.48	26.79	26.85	26.78	26.81	97%
3.00E+03	3.48	30.08	30.11	30.03	30.07	101%
3.00E+02	2.48	33.89	33.73	33.76	33.79	99%
3.00E+01	1.48	36.03	36.52	36.39	36.31	91%
Amplification efficiency						97.90%

293T Cell Residual DNA Fragment Analysis Detection Kit (qPCR)

Overview

Cat.No. HG-HF003

This kit is a kit specially designed for quantitative detection of the size distribution of residual 293T Cell DNA fragments in intermediates, bulk products and final products of various biological products.

This kit is based on the principle of PCR fluorescence probe method to quantitatively detect the size distribution of residual 293T Cell DNA fragments in samples. This kit designs three different amplified fragments (99 bp, 200 bp and 307 bp). The 293T Cell DNA quantitative reference is used to generate standard curves for different amplified fragments, and the fragment distribution of residual 293T Cell DNA in samples is analyzed by the ratio of different size fragments.

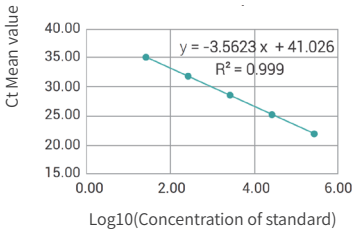
Specification

Assay range: 3.00×10^{1}~3.00×10^{5} fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Residual DNA fragment (⩾ 99bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	21.64	21.64	22.86	22.83
3.00E+04	4.48	25.01	25.01	22.79	
3.00E+03	3.48	28.49	28.49	22.90	
3.00E+02	2.48	31.81	31.81	22.69	
3.00E+01	1.48	34.69	34.69	22.92	
Amplification efficiency				103.37%	

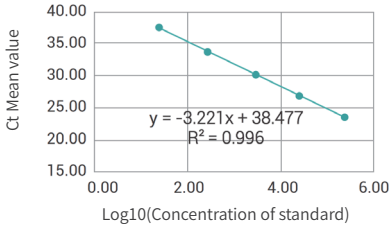
Residual DNA fragment (⩾ 99bp) Standard curve



Residual DNA fragment (⩾ 200bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.02	23.02	22.98	23.00
3.00E+04	4.48	26.39	26.39	23.05	
3.00E+03	3.48	30.32	30.32	23.02	
3.00E+02	2.48	33.57	33.57	22.99	
3.00E+01	1.48	36.05	36.05	23.00	
Amplification efficiency				96.08%	

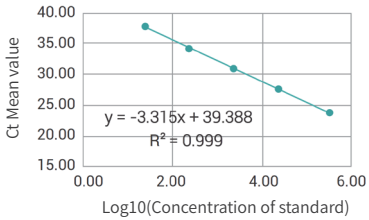
Residual DNA fragment (⩾ 200bp) Standard curve



Residual DNA fragment (⩾ 307bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.06	23.06	22.97	22.96
3.00E+04	4.48	27.12	27.12	22.89	
3.00E+03	3.48	31.27	31.27	22.95	
3.00E+02	2.48	34.50	34.50	22.91	
3.00E+01	1.48	37.72	37.72	23.06	
Amplification efficiency				94.76%	

Residual DNA fragment (⩾ 307bp) Standard curve



Hela Cell Residual DNA Detection Kit (qPCR)

Overview

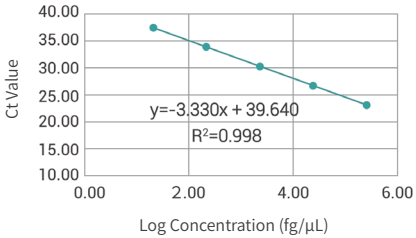
Cat.No. HG-HD005

Hela Cell residual DNA detection kit is a kit specially designed for quantitative detection of Hela Cell DNA in intermediate products, bulk products and final products of various biological products. This kit quantitatively detects Hela Cell residual DNA in samples based on Taqman probe principle. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: 3.00×10^{1}~3.00×10^{5}fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
3.00E+05	5.48	22.69	22.53	22.58	22.60	0.36%
3.00E+04	4.48	25.73	25.61	25.52	25.62	0.42%
3.00E+03	3.48	29.06	29.02	28.98	29.02	0.14%
3.00E+02	2.48	32.35	32.71	32.63	32.56	0.59%
3.00E+01	1.48	36.11	35.68	35.46	35.75	0.93%
Amplification efficiency						99.86%

Hela Cell Residual DNA Fragment Analysis Detection Kit (qPCR)

Overview

Cat.No. HG-HF004

This kit is a kit specially designed for quantitative detection of the size distribution of residual Hela Cell DNA fragments in intermediates, bulk products and final products of various biological products.

This kit is based on the principle of PCR fluorescence probe method to quantitatively detect the size distribution of residual Hela Cell DNA fragments in samples. This kit designs three different amplified fragments (99 bp, 200 bp and 307 bp). The Hela Cell DNA quantitative reference is used to generate standard curves for different amplified fragments, and the fragment distribution of residual Hela Cell DNA in samples is analyzed by the ratio of different size fragments.

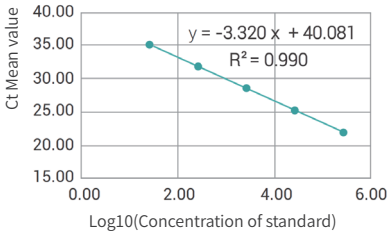
Specification

Assay range: 3.00×10^{1}~3.00×10^{5} fg/μL
Limit of quantitation: 3.00×10^{1} fg/μL
Precision: CV% ⩽ 15%

Residual DNA fragment (⩾ 99bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	22.01	22.01	22.94	
3.00E+04	4.48	25.69	25.69	22.48	
3.00E+03	3.48	28.83	28.83	22.91	22.79
3.00E+02	2.48	31.98	31.98	22.79	
3.00E+01	1.48	34.85	34.85	22.82	
Amplification efficiency				103.26%	

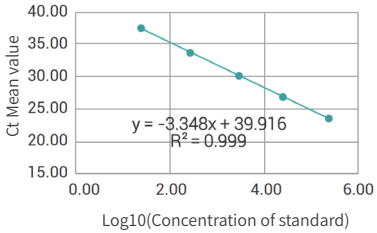
Residual DNA fragment (⩾ 99bp) Standard curve



Residual DNA fragment (⩾ 200bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.16	23.16	22.99	23.03
3.00E+04	4.48	26.68	26.68	23.03	
3.00E+03	3.48	30.05	30.05	22.96	
3.00E+02	2.48	33.27	33.27	23.14	
3.00E+01	1.48	36.32	36.32	23.05	
Amplification efficiency				98.05%	

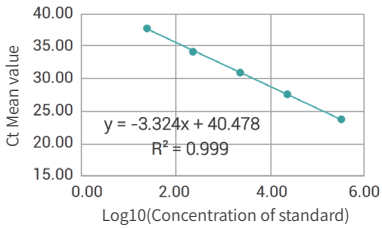
Residual DNA fragment (⩾ 200bp) Standard curve



Residual DNA fragment (⩾ 307bp) Detection

Standard		Ct Value		Ct-IPC value	
Concentration (fg/μL)	Log10 (Concentration)	Ct Value	Mean value	Ct-IPC value	Mean value
3.00E+05	5.48	23.86	23.86	23.02	22.97
3.00E+04	4.48	27.63	27.63	22.96	
3.00E+03	3.48	31.32	31.32	22.93	
3.00E+02	2.48	34.29	34.29	22.89	
3.00E+01	1.48	37.68	37.68	23.03	
Amplification efficiency				96.89%	

Residual DNA fragment (⩾ 307bp) Standard curve



E1A&SV40LTA Residual DNA Detection Kit (Multiplex qPCR)

Overview

Cat.No. HG-EA001

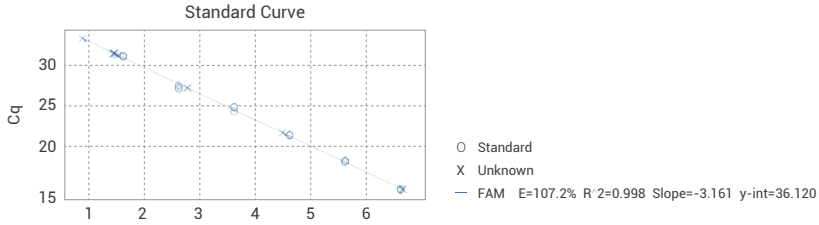
This kit is designed for the rapid and specific detection of residual E1A&SV40LTA DNA derived from host cell (e.g., HEK293 cell) in biological products.

This kit adopts the fluorescent probe method and multiplex PCR method. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching 40copies/μL.

Specification

Assay range: 4×10^{1} ~4×10^{6}copies/μL
Limit of quantitation: 4×10^{1}copies/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (copies/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
4.00E+06	6.60	15.15	15.14	15.04	15.11	0.40%
4.00E+05	5.60	18.51	18.63	18.40	18.51	0.63%
4.00E+04	4.60	21.66	21.70	21.71	21.69	0.12%
4.00E+03	3.60	25.04	24.51	25.11	24.89	1.32%
4.00E+02	2.60	27.48	27.75	27.25	27.49	0.91%
4.00E+01	1.60	31.30	31.18	31.17	31.22	0.24%
Amplification efficiency						107.2%

E1A Residual DNA Detection Kit (qPCR)

Overview

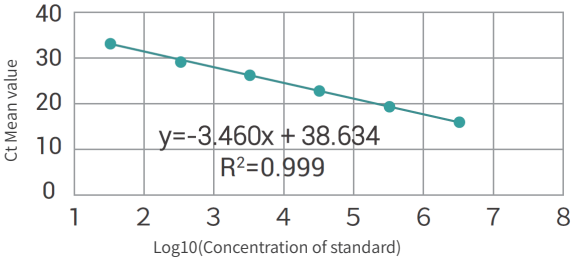
Cat.No. HG-EA002

The E1A residual DNA detection kit can rapidly and specifically detect E1A DNA residues derived from host cells (such as HEK293T cells) in biological products.
This kit quantitatively detects human residual DNA in samples based on Taqman probe principle. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching 40 copies/μL.

Specification

Assay range: 4×10^{1} ~4×10^{6}copies/μL
Limit of quantitation: 4×10^{1}copies/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (copies/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
4.00E+06	6.60	11.64	11.69	11.42	11.58	1.27%
4.00E+05	5.60	14.83	14.84	14.80	14.82	0.13%
4.00E+04	4.60	18.24	18.02	18.28	18.18	0.77%
4.00E+03	3.60	21.79	21.65	21.92	21.78	0.62%
4.00E+02	2.60	25.02	25.07	25.05	25.05	0.09%
4.00E+01	1.60	28.50	28.38	28.66	28.51	0.50%
Amplification efficiency						96.94%

Nuclease ELISA Detection Kit

Overview

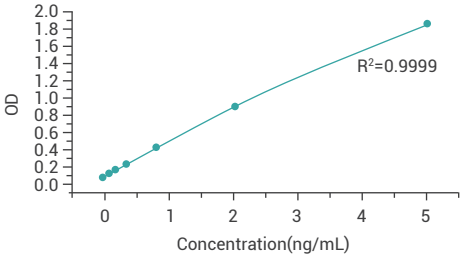
Cat.No. HG-BE001

This kit is designed for the quantitative detection of residual nuclease content in intermediates, semi-finished products and finished products of various biological products by using a double-antibody sandwich method.

Specification

Assay range: 0.05-5ng/mL
Limit of quantitation: 0.05ng/mL
Limit of detection: 0.05ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
5	1.925	1.774	1.849
2	0.917	0.865	0.891
0.8	0.447	0.441	0.444
0.32	0.228	0.209	0.218
0.128	0.146	0.137	0.141
0.0512	0.114	0.107	0.110
0	0.090	0.091	0.091

Plasmid Residual DNA Detection Kit (qPCR)

Overview

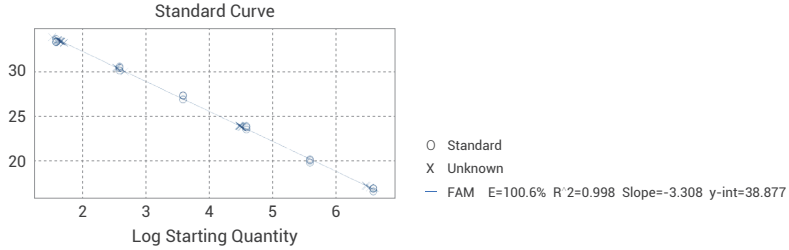
Cat.No. HG-ZL001

This kit is designed for the quantitative detection of residual plasmid DNA in intermediates, semi-finished products and finished products of various biological products. Plasmid DNA content in samples (e.g., lentivirus, adenovirus) is detected by analyzing the consensus sequence.
This kit uses TaqMan fluorescence probe principle, with strong specificity, high sensitivity and reliable performance.

Specification

Assay range: 4×10^{1}~4×10^{6}copies/μL
Limit of quantitation: 4×10^{1}copies/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (copies/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
4.00E+06	6.60	16.76	17.14	17.07	16.99	1.18%
4.00E+05	5.60	19.93	20.32	20.20	20.15	1.01%
4.00E+04	4.60	23.59	23.99	23.85	23.81	0.85%
4.00E+03	3.60	26.90	27.34	27.37	27.20	0.97%
4.00E+02	2.60	30.09	30.54	30.41	30.35	0.76%
4.00E+01	1.60	33.27	33.20	33.57	33.35	0.60%
Amplification efficiency						100.6%

Plasmid Residual DNA (Kanamycin Resistance Gene) Detection Kit (qPCR)

Overview

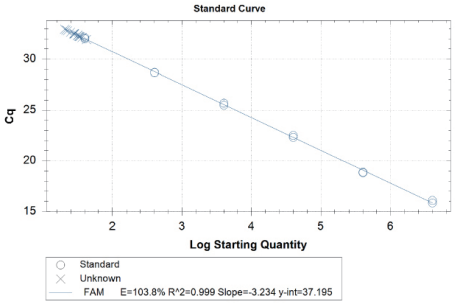
Cat.No. HG-ZL002

Plasmid Residual DNA Detection Kit targets the sequences of kanamycin resistance genes commonly found in plasmids and is able to quantitatively detect all plasmid DNA residues with kanamycin resistance. This kit is based on the principle of TaqMan fluorescence probe, with potent specificity, high sensitivity and reliable performance, and is used as a kit specially designed for the detection of plasmid DNA residues in intermediates, bulk products and final products of various biological products.

Specification

Assay range: 4×10^{1} - 4×10^{6} copies/μL
Limit of quantitation: 4×10^{1} copies/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (copies/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
4.00E+06	6.60	16.09	15.84	15.93	15.95	0.78%
4.00E+05	5.60	18.88	18.83	18.92	18.87	0.25%
4.00E+04	4.60	22.31	22.50	22.43	22.42	0.43%
4.00E+03	3.60	25.69	25.49	25.58	25.59	0.38%
4.00E+02	2.60	28.69	28.69	28.47	28.62	0.45%
4.00E+01	1.60	32.11	32.01	32.08	32.07	0.16%
Amplification efficiency						103.8%

BSA ELISA Detection Kit

Overview

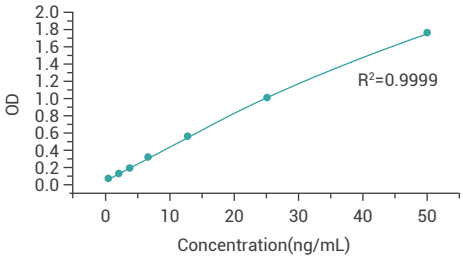
Cat.No. HG-BS001

This kit is designed for the quantitative detection of residual BSA content in intermediates, semi-finished products and finished products of various biological products by using a double-antibody sandwich method.

Specification

Assay range: 1.56-50 ng/mL
Limit of quantitation: 1.56 ng/mL
Limit of detection: 0.5ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
50	1.775	1.803	1.789
25	1.091	0.995	1.043
12.5	0.571	0.591	0.581
6.25	0.324	0.308	0.316
3.125	0.193	0.179	0.186
1.56	0.132	0.127	0.130
0	0.072	0.088	0.080

Trypsin ELISA Detection Kit

Overview

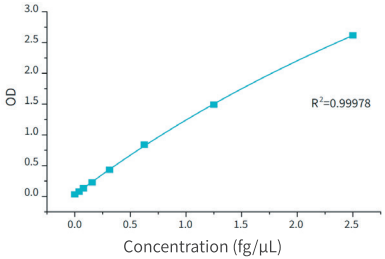
Cat.No. HG-TR001

This kit is designed for the quantitative detection of residual Trypsin content in intermediates, semi-finished products and finished products of various biological products by using a double-antibody sandwich method.

Specification

Assay range: 0.039~2.5 ng/mL
Limit of quantitation: 0.039ng/mL
Limit of detection: 0.003ng/mL
Precision: CV% ⩽ 10%
Recovery rate: 80%~120%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
2.5	2.6273	2.6046	2.61595
1.25	1.5106	1.4703	1.49045
0.625	0.8347	0.8452	0.83995
0.3125	0.4358	0.4291	0.43245
0.156	0.2306	0.2232	0.2269
0.078	0.1307	0.1334	0.13205
0.039	0.0809	0.0765	0.0787
0	0.0325	0.0336	0.03305

BCA Rapid Protein Quantitative Detection Kit

Overview

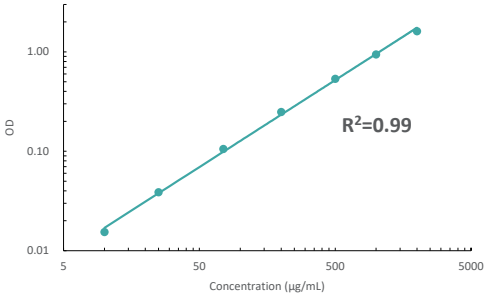
Cat.No. HG-BC001

BCA Rapid Protein Quantitative Detection Kit in the BlueKit™ series has the characteristics of high sensitivity, stable results, and simple operation. The principle of this kit is that Cu2+ is reduced by protein to Cu+ under alkaline conditions, and then Cu+ and BCA interact to form a purple reaction complex, showing a strong absorbance at 562 nm, and presenting a good linear relationship with protein concentration.

Specification

Assay range: 10~2000 μg/mL
Limit of detection: 0.39 μg/mL

Standard curve



Datasheet

Concentration of standard (μg/mL)	OD value1	OD value2	Mean value
2000	1.7229	1.7210	1.7220
1000	1.0423	1.0500	1.0462
500	0.6408	0.6380	0.6394
200	0.3519	0.3540	0.3530
75	0.2098	0.2094	0.2096
25	0.1424	0.1430	0.1427
10	0.1196	0.1190	0.1193
0.00	0.1039	0.1039	0.1039

PG13 Residual DNA Detection Kit (qPCR)

Overview

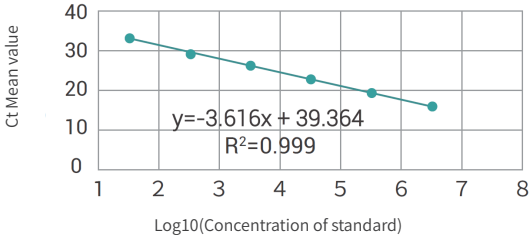
Cat.No. HG-PG001

The PG13 cell line was obtained by integrating a Moloney leukemia virus (MLV) expression vector and gibbon leukemia virus (GALV) membrane protein gene modification from mouse embryonic fibroblasts (NIH/3T3). PG13 cells, as a type of packaging cell, are currently mainly used in the development of cellular products such as CAR-T/TCR-T cells. Therefore, relevant biological products need to be tested for the content of residual DNA in PG13 cells.
This kit is equipped with PG13 DNA quantitative reference which can quickly and accurately quantitatively detect PG13 residual DNA in the intermediate, semi-finished and finished products of various biological products.

Specification

Assay range: 3.00 - 3.00x10^5 fg/μL
Limit of quantitation:3 fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (copies/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
3.00E+05	5.48	12.14	12.15	12.22	12.17	0.37%
3.00E+04	4.48	15.44	15.47	15.48	15.46	0.13%
3.00E+03	3.48	18.77	18.81	18.93	18.84	0.44%
3.00E+02	2.48	22.39	22.45	22.27	22.37	0.41%
3.00E+01	1.48	25.67	25.68	25.86	25.74	0.42%
3.00E+00	0.48	29.19	29.15	28.94	29.09	0.46%
Amplification efficiency						98.63%

03 Detection Kits for Cell

Blood/Tissue/Cell Genomic DNA Extraction Kit
CAR/TCR Gene Copy Number Detection Kit (Multiplex qPCR)
RCL(VSVG) Gene Copy Number Detection Kit (qPCR)
BaEV Gene Copy Number Detection Kit (qPCR)
Mycoplasma DNA Sample Preprocessing Kit (Magnetic Bead Method)
Mycoplasma DNA Detection Kit (qPCR)-ZY001
Mycoplasma DNA Detection Kit (qPCR)-ZY002
CRS Cytokine Multiplex ELISA Detection Kit
HIV-1 p24 ELISA Detection Kit
Cell Residual Human IL-2 ELISA Detection Kit
Cell Residual Human IL-4 ELISA Detection Kit
Cell Residual Human IL-7 ELISA Detection Kit
Cell Residual Human IL-10 ELISA Detection Kit
Cell Residual Human IL-12 p70 ELISA Detection Kit
Cell Residual Human IL-15 ELISA Detection Kit
Cell Residual Human IL-21 ELISA Detection Kit
Cell Residual Human TGF-β1 ELISA Detection Kit
Human IFN-γ ELISA Detection Kit
Human TNF-α ELISA Detection Kit
Human Granzyme B ELISA Detection Kit
Gentamicin Residual ELISA Detection Kit

Blood/Tissue/Cell Genomic DNA Extraction Kit (Magnetic bead method)

Overview

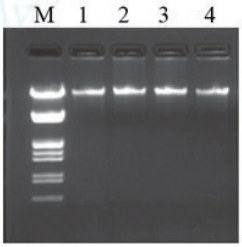
Cat.No. HG-NA100

This kit is designed for the simple and efficient extraction of genome. This kit can be applied to extract a small quantity of samples manually and perform in a high-throughput scale automatically.

Genomic DNA Extracted by this kit can be used to detect host cell DNA in some experiments.

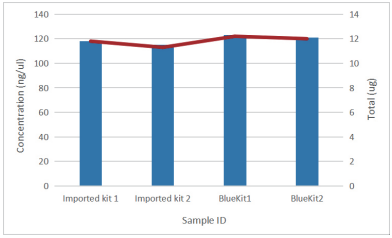
Applications

Shows higher yield and higher purity compared to competing products.



Electrophoresis in 1% agarose gels
Strip No.1&2: Blood/Tissue/Cell Genomic DNA Extraction Kit (Magnetic bead method)
Strip No.3&4: Imported Kit
Results show that genomic fragments extracted using the Bluekit™ kit are as complete as those using imported kits.

Extract genomic DNA from two blood samples respectively with the imported kit and the Bluekit™ kit, and then detect the concentration with Nanodrop.
Results show that the the Bluekit™ kit has 5-10% yield more than the imported kit.



	ng/μL	Total(μg)	260/280	260/230
Sample 1	108.72	10.87	1.80	2.13
	112.72	11.27	1.79	2.09
Sample 2	106.56	10.66	1.80	2.10
	106.95	10.70	1.79	2.07

CAR/TCR Gene Copy Number Detection Kit (Multiplex qPCR)

Overview

Cat.No. HG-CA001

This kit is designed for the quantitative detection of CAR gene copy number in the genome of CAR-T/TCR-T cells prepared by using HIV-1 lentiviral vector technology.

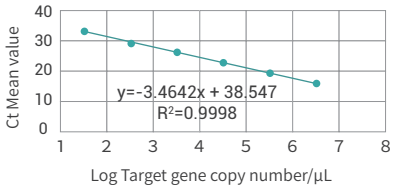
This kit adopts the fluorescent probe method and multiplex PCR method to detect the DNA sequence related to integration or expression function on the transfer plasmid and the reference gene (RFG) in human cells, and the CAR gene copy number/cell in the sample can be calculated. The kit is a rapid, specific and reliable device.

Specification

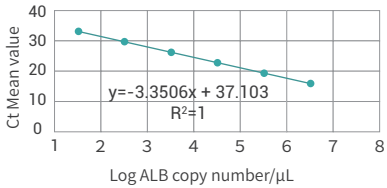
Assay range: 3.00×10^{1} ~3.00×10^{6} copies/μL
Limit of quantitation: 30 copies/μL
Limit of detection: 15 copies/μL
Precision: CV% ⩽ 15%

Standard curve

Target gene copy number Standard curve



RFG gene copy number Standard curve



Datasheet

Copies/μL	Log Copies	Target gene copy number Standard curve (FAM)					RFG gene copy number Standard curve (Cy5)				
		Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	Recovery rate
3.00E+06	6.48	16.14	16.29	16.21	16.21	93.33%	15.39	15.48	15.42	15.43	97.93%
3.00E+05	5.48	19.27	19.61	19.43	19.43	109.50%	18.67	18.79	18.71	18.72	101.97%
3.00E+04	4.48	23.00	23.04	23.01	23.01	101.34%	22.09	22.12	22.03	22.08	101.49%
3.00E+03	3.48	26.42	26.53	26.54	26.54	100.21%	25.43	25.46	25.45	25.45	100.45%
3.00E+02	2.48	30.10	30.00	30.06	30.06	94.34%	28.85	28.80	28.88	28.84	97.50%
3.00E+01	1.48	33.41	33.50	33.27	33.27	102.29%	32.25	32.18	32.00	32.14	100.80%
Amplification efficiency						94.4%	Amplification efficiency				98.82%

RCL(VSVG) Gene Copy Number Detection Kit (qPCR)

Overview

Cat.No. HG-RC001

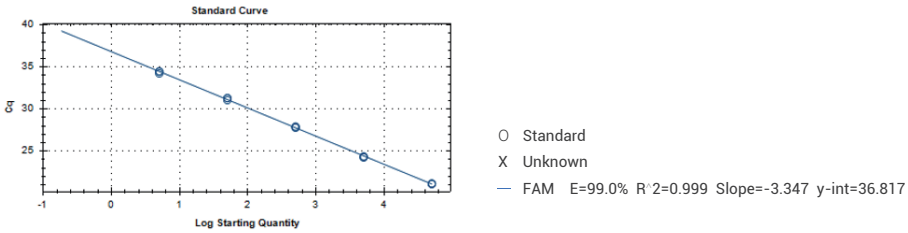
This kit is designed for the quantitative detection of RCL gene copy number in the genome of CAR-T cells prepared by using HIV-1 lentiviral vector technology.

This kit adopts the fluorescent probe method and multiplex PCR method to detect the DNA sequence related to integration or expression function on the transfer plasmid, and the VSVG gene copy number in the sample can be calculated. The kit is a rapid, specific and reliable device.

Specification

Assay range: 1.00×10^{1}~1.00×10^{5}copies/μL
Limit of quantitation: 8 copies/μL
Limit of detection: 1 copies/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (copies/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
1.00E+05	5.00	20.27	20.16	20.13	20.18	0.36%
1.00E+04	4.00	23.35	23.21	23.27	23.28	0.32%
1.00E+03	3.00	26.93	26.85	26.96	26.91	0.21%
1.00E+02	2.00	30.31	30.31	30.20	30.27	0.21%
1.00E+01	1.00	33.54	33.30	33.19	33.34	0.53%
Amplification efficiency						99.60%

BaEV Gene Copy Number Detection Kit (qPCR)

Overview

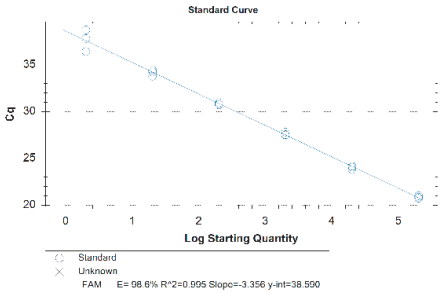
Cat.No. HG-BA001

The BaEV Gene Copy Number Detection Kit is a specialized kit for quantitative detection of BaEV gene copy number.
This kit quantitatively detects the copy number of BaEV gene in the sample based on the fluorescence probe method. This kit is rapid, specific and reliable in performance.

Specification

Assay range: 2.00×10^{1}~2.00×10^{6} copies/μL
Limit of quantitation: 20 copies/μL
Limit of detection: 2 copies/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (copies/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
2.00E+05	5.30	20.86	21.01	20.74	20.87	0.64%
2.00E+04	4.30	24.05	24.17	23.83	24.02	0.71%
2.00E+03	3.30	27.81	27.50	27.56	27.62	0.60%
2.00E+02	2.30	30.95	30.80	30.73	30.83	0.36%
2.00E+01	1.30	34.24	34.42	33.79	34.15	0.96%
2.00E+00	0.30	37.41	37.81	37.72	37.64	0.55%
Amplification efficiency						99.60%

Mycoplasma DNA Sample Preprocessing Kit (Magnetic Bead Method)

Overview

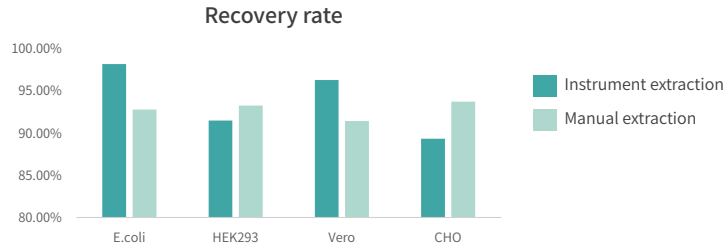
Cat.No. HG-CL200

The kit is used for pre-processing of biological product samples to accurately extract residual DNAs of host cells in various biological products. The kit is applicable to various matrix buffers to effectively extract and purify trace amounts of DNAs. It can be used together with mycoplasma DNA detection kit manufactured by Hillgene.

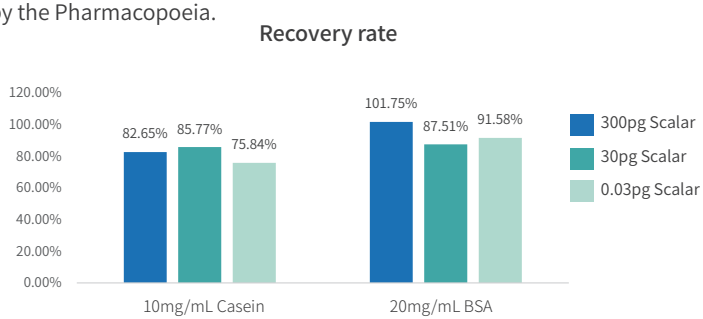
Specification

Detection sensitivity: 0.03pg/μL
Recovery rate: 70%~130%

Data



Manual extraction and instrument extraction were performed on DNA samples of different host types, and the final sample recovery rates were 70% to 130%, which were better than the 50% to 150% required by the Pharmacopoeia.



The two sample matrices (PBS+10mg/mL BSA and PBS+10mg/mL casein) were added with a total of 0.03pg, 3pg, and 300pg of gDNA reference substance for pretreatment, and the final recovery of the standard addition was 70 %~130%.

Mycoplasma DNA Detection Kit (qPCR)-ZY001

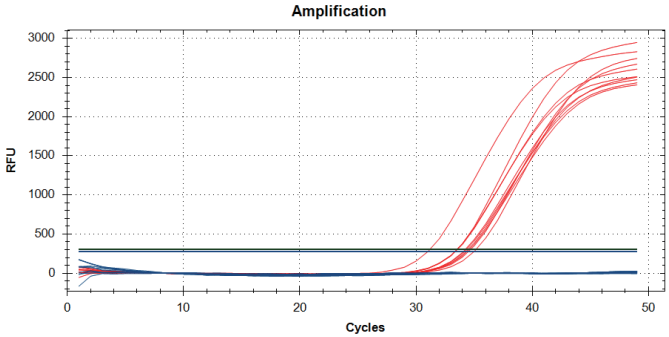
Overview

Cat.No. HG-ZY001

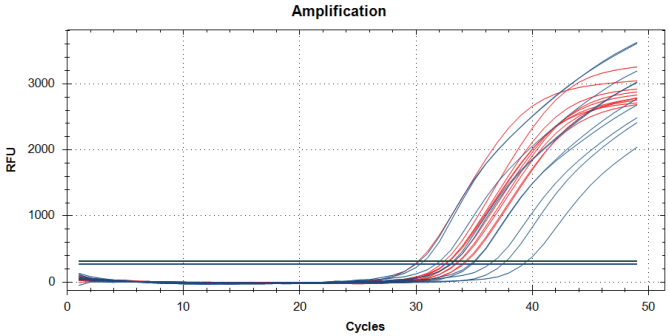
This kit is designed for the detection of mycoplasma contamination in master cell bank, working cell bank, cells for clinical use and biological products. This kit conforms to relevant regulations about mycoplasma testing in EP2.6.7 and JP XVI.

This kit adopts the qPCR-fluorescent probe method. The kit is a rapid, specific and reliable device and can finish the detection within 2 hours.

Test curve



Negative



Positive

FAM

HEX

Datasheet

	FAM(CT Value)		HEX(CT Value)	
	Negative	Positive	Negative	Positive
1	NA	31.72	34.45	32.62
2	NA	33.05	31.08	33.12
3	NA	36.32	33.43	33.45
4	NA	30.01	34.56	30.02
5	NA	30.37	35.05	33.55
6	NA	34.68	34.22	34.19
7	NA	34.83	34.35	32.63
8	NA	39.23	34.12	32.58
9	NA	32.95	33.39	34.07
10	NA	37.44	33.41	32.24

Results of 10 mycoplasma standards				Results of 3 relevant bacteria		
Strain	Positive/Total	Strain	Positive/Total	L.acidophilus	S.pneumoniae	Clos. acetobutyleum
M.orale	24/24	M.synoviae	24/24	Negative	Negative	Negative
M.galliscepticum	23/24	M.arginini	23/24			
A.laidlawii	24/24	M.hyorhinis	24/24			
M.fermentans	23/24	Spiroplasma citri	24/24			
M.pneumonia	24/24	M.saliuarium	24/24			

Mycoplasma DNA Detection Kit (qPCR)-ZY002

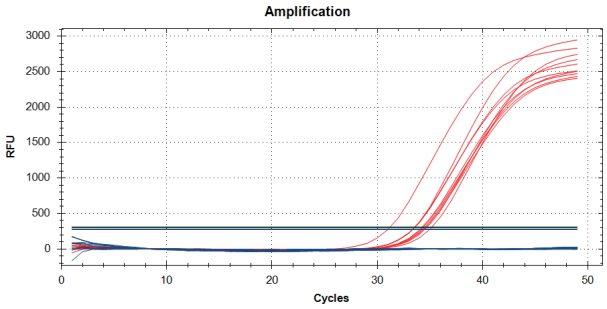
Overview

Cat.No. HG-ZY002

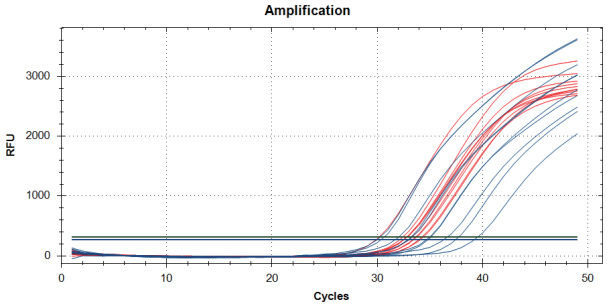
The kit is used to qualitatively detect the presence of mycoplasma contamination in master cell banks, working cell banks, virus seed lots, control cells, and cells for clinical therapy.
The kit uses qPCR-fluorescent probe technology to verify with reference to mycoplasma detection-related requirements in EP2.6.7 and JPXVII. It can cover more than 100 mycoplasmas and has no cross reaction with closely related strains. The detection is rapid which can be completed within 2 hours, with strong specificity.

Specification

50 Reactions.



Negative



Positive

FAM

Cy5

Datasheet

	FAM(CT Value)		HEX(CT Value)	
	Negative	Positive	Negative	Positive
1	NA	32.65	33.26	32.48
2	NA	34.26	32.29	33.23
3	NA	35.32	35.46	34.67
4	NA	31.51	34.79	31.68
5	NA	30.54	35.25	35.91
6	NA	34.97	33.57	34.20
7	NA	34.32	34.35	33.26
8	NA	38.45	35.87	35.54
9	NA	33.67	33.24	33.12
10	NA	37.41	33.41	32.24

Results of 10 mycoplasma standards				Results of 3 relevant bacteria		
Strain	Positive/Total	Strain	Positive/Total	L.acidophilus	S.pneumoniae	Clos. acetobutyleum
M.orale	24/24	M.synoviae	24/24	Negative	Negative	Negative
M.galliscepticum	23/24	M.arginini	23/24			
A.laidlawii	24/24	M.hyorhinis	24/24			
M.fermentans	23/24	Spiroplasma citri	24/24			
M.pneumonia	24/24	M.saliuarium	24/24			

CRS Cytokine Multiplex ELISA Detection Kit

Overview

Cat.No. HG-HC001

The kit is an Enzyme Immunoassay kit for the semi-quantification of Human CAR-T / CRS (Cytokine Release Syndrome) Cytokine (IL2, IL6, IL10, IFN gamma) in serum, plasma and cell culture supernatants.

Specification

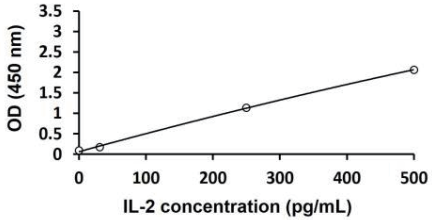
Assay range:

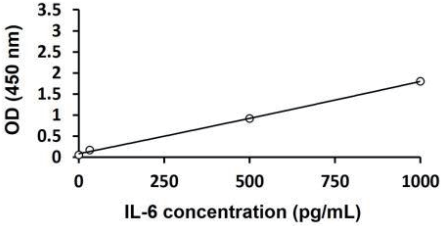
IL2 : 15.625-500 pg/mL
IL6 : 31.25-1000 pg/mL
IL10 : 15.625-500 pg/mL
IFN-γ : 15.625-500 pg/mL

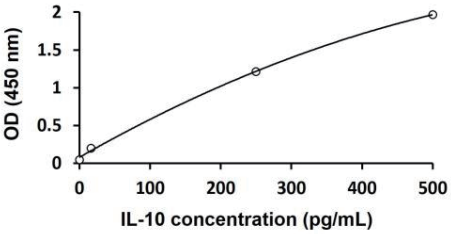
Limit of quantitation:

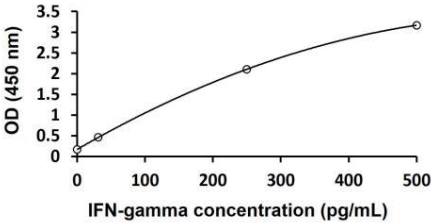
IL2 : 15.625 pg/mL
IL6 : 31.25 pg/mL
IL10 : 15.625 pg/mL
IFN-γ : 15.625 pg/mL

Standard curve









HIV-1 p24 ELISA Detection Kit

Overview

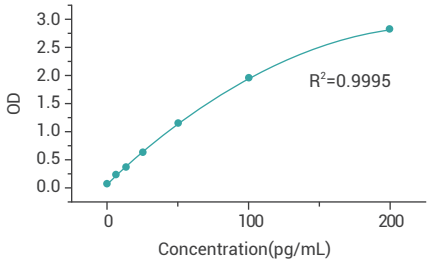
Cat.No. HG-P001

This kit is designed for the quantitative detection of p24 protein content by using a double-antibody sandwich method, suitable to detect residual p24 protein content in any HIV-1 lentivirus product.

Specification

Assay range : 6.25 - 200 pg/mL
Limit of quantitation : 6.25 pg/mL
Limit of detection : 3.125pg/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
200	2.846	2.841	2.844
100	1.965	1.979	1.972
50	1.110	1.189	1.150
25	0.636	0.582	0.609
12.5	0.362	0.338	0.350
6.25	0.213	0.204	0.209
0	0.061	0.059	0.060

Cell Residual Human IL-2 ELISA Detection Kit

Overview

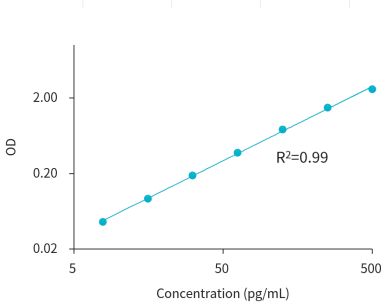
Cat.No. HG-IL002

BlueKit series cell residual human IL-2 ELISA detection kits use the double-antibody sandwich method to detect IL-2 protein in samples. IL-2 specific monoclonal antibodies are coated on microwell plates, and standards or samples to be tested are added to the reaction wells. Samples were added anti-IL-2 secondary antibody at the same time, and incubated at room temperature to form antibody-antigen-secondary antibody complexes. Wash to remove unbound matter, and the protein content in the sample is indicated by the degree of TMB color development.

Specification

Assay range: 7.81 - 500 pg/mL
Sensitivity: 0.59 pg/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
500.00	2.6660	2.5960	2.6310
250.00	1.5240	1.4780	1.5010
125.00	0.7904	0.7754	0.7829
62.50	0.4035	0.3916	0.3976
31.25	0.2154	0.2062	0.2108
15.63	0.1140	0.1154	0.1147
7.81	0.0674	0.0665	0.0670
0.00	0.0214	0.0215	0.0215

Cell Residual Human IL-4 ELISA Detection Kit

Overview

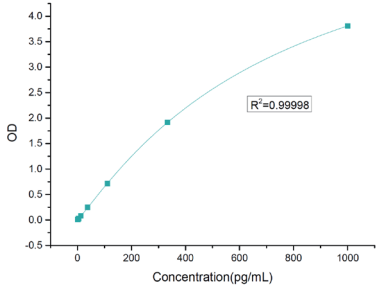
Cat.No. HG-IL004

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add human IL-4 standard and test samples to the microtiter plate pre-coated with anti-human IL-4 antibody, then add diluted biotin-labeled human IL-4 detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of human IL-4 detected in the samples.

Specification

Assay range: 1.37 - 1000 pg/mL
Sensitivity: 0.28 pg/mL

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
1000	3.8591	3.7755	3.8173
333.33	1.9249	1.9264	1.9257
111.11	0.7143	0.7335	0.7239
37.04	0.2498	0.2553	0.2526
12.35	0.0855	0.0907	0.0881
4.12	0.031	0.0371	0.0341
1.37	0.0163	0.0168	0.0166
0.00	0.0089	0.0085	0.0087

Cell Residual Human IL-7 ELISA Detection Kit

Overview

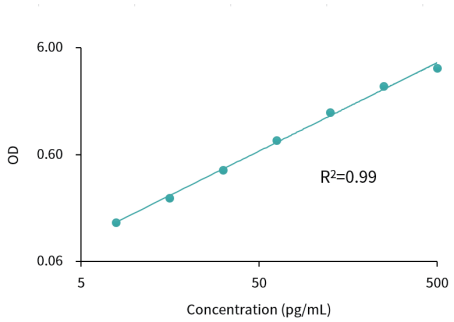
Cat.No. HG-IL007

BlueKit series cell residual human IL-7 ELISA detection kits use the double-antibody sandwich method to detect IL-7 protein in samples. IL-7 specific monoclonal antibodies are coated on microwell plates, and standards or samples to be tested are added to the reaction wells. Samples were added anti-IL-7 secondary antibody at the same time, and incubated at room temperature to form antibody-antigen-secondary antibody complexes. Wash to remove unbound matter, and the protein content in the sample is indicated by the degree of TMB color development.

Specification

Assay range： 7.81 - 500 pg/mL
Sensitivity： 0.4 pg/mL
Precision： CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
500.00	3.906	3.862	3.884
250.00	2.624	2.598	2.611
125.00	1.512	1.466	1.489
62.50	0.8117	0.8106	0.8112
31.25	0.4413	0.4202	0.4308
15.63	0.2297	0.2398	0.2348
7.81	0.1384	0.1391	0.1388
0.00	0.0479	0.0455	0.0467

Cell Residual Human IL-10 ELISA Detection Kit

Overview

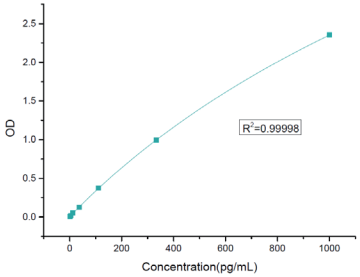
Cat.No. HG-IL010

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add human IL-10 standard and test samples to the microtiter plate pre-coated with anti-human IL-10 antibody, then add diluted biotin-labeled human IL-10 detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of human IL-10 detected in the samples.

Specification

Assay range: 1.37 - 1000 pg/mL
Sensitivity: 0.89 pg/mL

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
1000	2.4132	2.3674	2.3903
333.33	1.0486	1.0202	1.0344
111.11	0.4196	0.4064	0.413
37.04	0.1669	0.1653	0.1661
12.35	0.0946	0.086	0.0903
4.12	0.0567	0.0534	0.0551
1.37	0.0473	0.0433	0.0453
0	0.041	0.0372	0.0391

Cell Residual Human IL-12 p70 ELISA Detection Kit

Overview

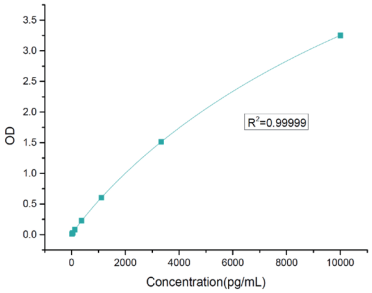
Cat.No. HG-IL012

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add human IL-12 p70 standard and test samples to the microtiter plate pre-coated with anti-human IL-12 p70 antibody, then add diluted biotin-labeled human IL-12 p70 detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of human IL-12 p70 detected in the samples.

Specification

Assay range: 13.72 - 10000 pg/mL
Sensitivity: 3.42 pg/mL

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
10000	3.2771	3.3112	3.2942
3333.33	1.6095	1.5049	1.5572
1111.11	0.6762	0.6148	0.6455
370.37	0.2712	0.2695	0.2704
123.46	0.127	0.1211	0.1241
41.15	0.0731	0.0668	0.07
13.72	0.0532	0.0527	0.053
0	0.0432	0.0423	0.0428

Cell Residual Human IL-15 ELISA Detection Kit

Overview

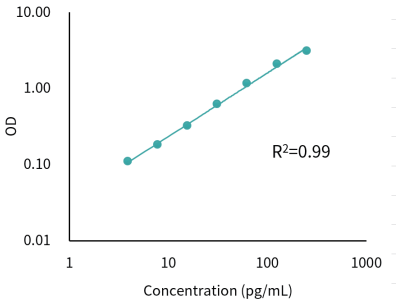
Cat.No. HG-IL015

BlueKit series cell residual human IL-15 ELISA detection kits use the double-antibody sandwich method to detect IL-15 protein in samples. IL-15 specific monoclonal antibodies are coated on microwell plates, and standards or samples to be tested are added to the reaction wells. Samples were added anti-IL-15 secondary antibody at the same time, and incubated at room temperature to form antibody-antigen-secondary antibody complexes. Wash to remove unbound matter, and the protein content in the sample is indicated by the degree of TMB color development.

Specification

Assay range: 3.91-250pg/mL
Sensitivity: 0.24pg/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
250.00	3.1130	3.0550	3.0840
125.00	2.1470	2.0170	2.0820
62.50	1.2330	1.0960	1.1645
31.25	0.6350	0.6030	0.6190
15.63	0.3069	0.3381	0.3225
7.81	0.1822	0.1820	0.1821
3.91	0.1116	0.1070	0.1093
0.00	0.0537	0.0513	0.0525

Cell Residual Human IL-21 ELISA Detection Kit

Overview

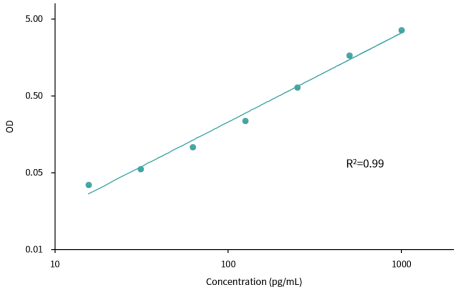
Cat.No. HG-IL021

BlueKit series cell residual human IL-21 ELISA detection kits use the double-antibody sandwich method to detect IL-21 protein in samples. IL-21 specific monoclonal antibodies are coated on microwell plates, and standards or samples to be tested are added to the reaction wells. Samples were added anti-IL-21 secondary antibody at the same time, and incubated at room temperature to form antibody-antigen-secondary antibody complexes. Wash to remove unbound matter, and the protein content in the sample is indicated by the degree of TMB color development.

Specification

Assay range: 15.63 - 1000 pg/mL
Sensitivity: 3.24 pg/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
1000.00	3.5504	3.6410	3.596
500.00	1.6473	1.7458	1.697
250.00	0.6417	0.6588	0.650
125.00	0.2261	0.2519	0.239
62.50	0.1038	0.1112	0.108
31.25	0.0529	0.0596	0.056
15.63	0.0339	0.0363	0.035
0.00	0.0173	0.0152	0.016

Cell Residual Human TGF-β1 ELISA Detection Kit

Overview

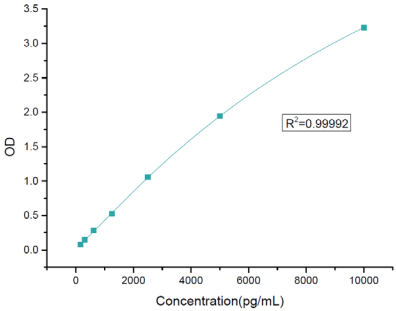
Cat.No. HG-TG001

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add human TGF-β1 standard and test samples to the microtiter plate pre-coated with anti-human TGF-β1 antibody, then add diluted biotin-labeled human TGF-β1 detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of human TGF-β1 detected in the samples.

Specification

Assay range: 156.25 - 10000 pg/mL
Sensitivity: 33.32 pg/mL

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
10000	3.3531	3.2747	3.3139
5000	1.9813	2.0695	2.0254
2500	1.1123	1.1675	1.1399
1250	0.5891	0.6252	0.6072
625	0.3551	0.3739	0.3645
312.5	0.2321	0.2237	0.2279
156.25	0.1488	0.1692	0.159
0.00	0.0886	0.0786	0.0836

Human IFN-γ ELISA Detection Kit

Overview

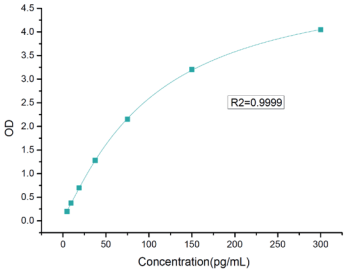
Cat.No. HG-IF002

BlueKit series human IFN-γ ELISA detection kits use the double-antibody sandwich method to detect IFN-γ protein in samples. IFN-γ specific monoclonal antibodies are coated on microwell plates, and standard products or samples to be tested are added to the reaction wells. Samples were added with anti-IFN-γ secondary antibody and incubated at room temperature to form antibody-antigen-secondary antibody complexes. Wash to remove unbound matter, and the protein content in the sample is indicated by the degree of TMB color development.

Specification

Assay range: 4.69 -300pg/mL
Sensitivity: 0.36pg/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
300.00	4.0655	4.0291	4.0473
150.00	3.1760	3.2300	3.2030
75.00	2.1280	2.1770	2.1525
37.50	1.2630	1.2960	1.2795
18.75	0.6812	0.7103	0.6958
9.38	0.3773	0.3778	0.3776
4.69	0.1919	0.2089	0.2004
0.00	0.0218	0.0220	0.0219

Human TNF-α ELISA Detection Kit

Overview

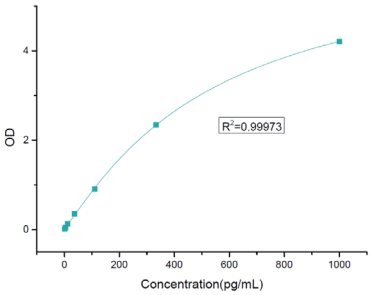
Cat.No. HG-TA001

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add human TNF-α standard and test samples to the microtiter plate pre-coated with anti-human TNF-α antibody, then add diluted biotin-labeled human TNF-α detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of human TNF-α detected in the samples.

Specification

Assay range: 1.37 - 1000 pg/mL
Sensitivity: 0.21 pg/mL

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
1000.00	4.3651	4.1387	4.2519
333.33	2.4084	2.3694	2.3889
111.11	0.9071	0.9969	0.9520
37.04	0.3960	0.3896	0.3908
12.35	0.1693	0.1712	0.1703
4.12	0.0819	0.0885	0.0852
1.37	0.0588	0.0628	0.0608
0.00	0.0390	0.0402	0.0396

Human Granzyme B ELISA Detection Kit

Overview

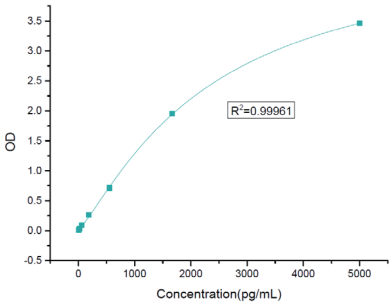
Cat.No. HG-GB001

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add human Granzyme B standard and test samples to the microtiter plate pre-coated with anti-human Granzyme B antibody, then add diluted biotin-labeled human Granzyme B detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of human Granzyme B detected in the samples.

Specification

Assay range: 6.86 - 5000 pg/mL
Sensitivity: 1.12 pg/mL

Standard curve



Datasheet

Concentration of standard (pg/mL)	OD value1	OD value2	Mean value
5000	3.4680	3.4680	3.468
1666.67	1.9590	1.9590	1.959
555.56	0.7201	0.7201	0.7201
185.19	0.2709	0.2709	0.2709
61.73	0.0973	0.0973	0.0973
20.58	0.0396	0.0396	0.0396
6.86	0.0187	0.0187	0.0187
0	0.0085	0.0085	0.0085

Gentamicin Residual ELISA Detection Kit

Overview

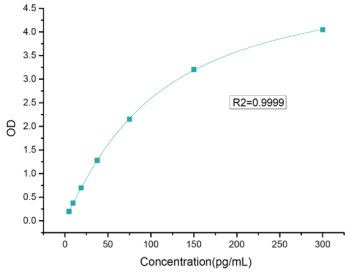
Cat.No. HG-GE001

This kit determines the trace residue of Gentamicin in samples by indirect competitive ELISA. The plate is pre-coated with conjugated antigen. Gentamicin remaining in the sample and conjugated antigen pre-coated on the plate strips compete for anti-Gentamicin antibody. Add enzyme-labeled secondary antibody, and then add TMB substrate for color development. Measure the absorbance (OD value) at 450 nm/630 nm using a plate reader, and calculate the percent absorbance. The concentration of Gentamicin in the sample is negatively correlated with the percent absorbance.

Specification

Assay range： 0.1 - 10 ng/mL
Sensitivity： 0.1 ng/mL

Standard curve



Datasheet

Standard Curve (ng/mL)	Percent Absorbance (%)
10	7.38
4	14.19
1.6	31.01
0.64	58.04
0.256	74.26
0.1024	82.67
0	100.00

04 Detection Kits for mRNA

DNase I ELISA Detection Kit
RNase Inhibitor ELISA Detection Kit
T7 RNA Polymerase ELISA Detection Kit(2G)
dsRNA ELISA Detection Kit
Inorganic Pyrophosphatase ELISA Detection Kit
Vaccinia Capping Enzyme ELISA Detection Kit

DNase I ELISA Detection Kit

Overview

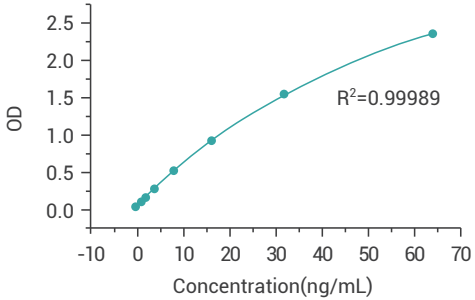
Cat.No. HG-DI001

This kit is designed for the quantitative detection of residual Dnase I content added in RNA pharmaceuticals processes by using a double-antibody sandwich method.

Specification

Assay range: 1-64 ng/mL
Limit of quantitation: 1 ng/mL
Limit of detection: 0.5 ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
64	2.373	2.347	2.360
32	1.520	1.546	1.533
16	0.933	0.934	0.9335
8	0.518	0.536	0.527
4	0.259	0.291	0.275
2	0.166	0.168	0.167
1	0.115	0.109	0.112
0	0.057	0.049	0.053

RNase Inhibitor ELISA Detection Kit

Overview

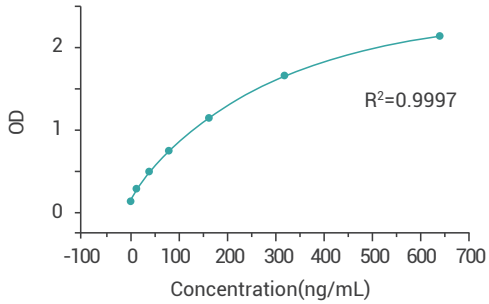
Cat.No. HG-RI001

This kit is designed for the quantitative detection of residual RNase Inhibitor content added in RNA pharmaceuticals processes by using a double-antibody sandwich method.

Specification

Assay range: 20-640 ng/mL
Limit of quantitation: 20 ng/mL
Limit of detection: 5 ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
640	2.213	2.110	2.162
320	1.661	1.641	1.651
160	1.181	1.143	1.162
80	0.743	0.755	0.749
40	0.486	0.478	0.482
20	0.298	0.292	0.295
0	0.151	0.15	0.151

T7 RNA Polymerase ELISA Detection Kit(2G)

Overview

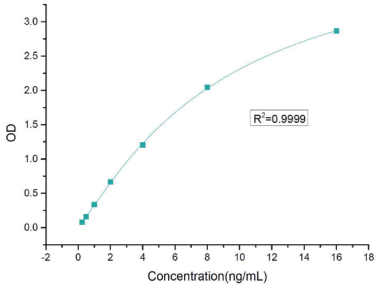
Cat.No. HG-TP001-2G

This kit is designed for the quantitative detection of residual T7 RNA Polymerase content added in RNA pharmaceuticals processes by using a double-antibody sandwich method.

Specification

Assay range: 0.25-16 ng/mL
Limit of quantitation: 0.25 ng/mL
Limit of detection: 0.012 ng/mL
Precision: CV% ⩽ 10%, RE% ⩽ ±15%

Standard curve



Datasheet

Concentration of standard (ng/mL)	OD value1	OD value2	Mean value
16	2.8708	2.9433	2.9071
8	2.0941	2.0731	2.0836
4	1.2382	1.2562	1.2472
2	0.7254	0.6866	0.7060
1	0.3880	0.3634	0.3757
0.5	0.2124	0.1877	0.2001
0.25	0.1233	0.117	0.1202
0.00	0.0393	0.0422	0.0408

dsRNA ELISA Detection Kit

Overview

Cat.No. HG-DS001

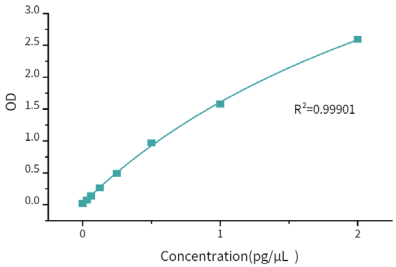
This dsRNA ELISA detection kits of BlueKit™ series use a double antibody sandwich method to quantitatively detect the content of double stranded RNA (dsRNA) in samples. The detected dsRNA is 60 bp or more in length, and is not related to its nucleic acid sequence.

Specification

Standard type	Assay range (pg/μL)	Limit of quantitation (pg/μL)	Limit of detection (pg/μL)	Recovery rate	CV%
No modification	0.0156-0.5	0.0156	0.001	80-120%	⩽ 10%
N1-Me-pUTP modified	0.0312-1	0.0312	0.001	80-120%	⩽ 10%
pUTP modified	0.0156-0.5	0.0156	0.001	80-120%	⩽ 10%
5-OMe-UTP modified	0.0625-1	0.0625	0.01	80-120%	⩽ 10%

*Range of linearity: Coefficient of determination ＞ 0.99

Standard curve



Datasheet

Concentration of standard (pg/μL)	OD value1	OD value2	Mean value
2	2.8412	2.7362	2.7887
1	1.8725	1.9135	1.8930
0.5	1.0863	1.1207	1.1035
0.25	0.623	0.6055	0.6143
0.125	0.3388	0.3292	0.3340
0.0625	0.1947	0.1885	0.1916
0.0312	0.1192	0.1247	0.1220
0	0.0567	0.0518	0.0543

Inorganic Pyrophosphatase ELISA Detection Kit

Overview

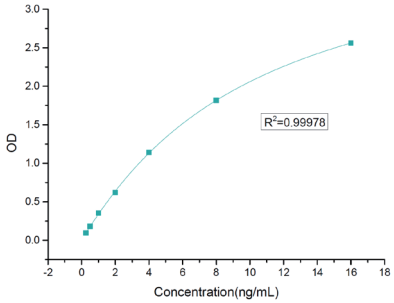
Cat.No. HG-IP001

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add PPase standard and test samples to the microtiter plate precoated with anti-PPase antibody, then add diluted biotin-labeled PPase detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of PPase detected in the sample.

Specification

Assay range: 0.25 - 16 ng/mL
Limit of quantitation: 0.25 ng/mL

Standard curve



Datasheet

Concentration of standard (ng/μL)	OD value1	OD value2	Mean value
16	2.698	2.612	2.655
8	1.952	1.864	1.908
4	1.202	1.265	1.234
2	0.699	0.729	0.714
1	0.439	0.454	0.447
0.5	0.265	0.281	0.273
0.25	0.192	0.183	0.188
0	0.094	0.091	0.093

Vaccinia Capping Enzyme ELISA Detection Kit

Overview

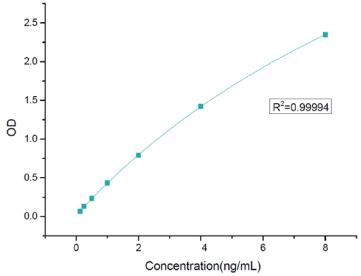
Cat.No. HG-VC001

This kit uses double-antibody sandwich enzyme-linked immunosorbent assay (ELISA) method. Add Vaccinia Capping Enzyme standard and test samples to the microtiter plate precoated with anti-Vaccinia Capping Enzyme antibody, then add diluted biotin-labeled Vaccinia Capping Enzyme detection antibody, finally add streptavidin-HRP to form the antibody + antigen + antibody-Biotin + SA-HRP complex, wash the plate and add TMB chromogenic solution for color development. TMB is converted from colorless to blue under the catalysis of HRP enzyme and finally to yellow under the action of stop solution. The shade of yellow is positively correlated with the amount of Vaccinia Capping Enzyme detected in the sample.

Specification

Assay range: 0.125 - 8 ng/mL
Limit of quantitation: 0.125 ng/mL

Standard curve



Datasheet

Concentration of standard (ng/μL)	OD value1	OD value2	Mean value
8	2.455	2.374	2.415
4	1.517	1.457	1.487
2	0.886	0.828	0.857
1	0.505	0.492	0.499
0.5	0.310	0.286	0.298
0.25	0.205	0.190	0.198
0.125	0.135	0.128	0.132
0	0.066	0.065	0.066

05 Detection Kits for Antibodies/vaccines

Protein A ELISA Detection Kit
CHO Residual DNA Detection Kit (qPCR)
CHO HCP ELISA Detection Kit (qPCR)
Vero Residual DNA Detection Kit (qPCR)
Sf9 HCP ELISA Detection Kit

Protein A ELISA Detection Kit

Overview

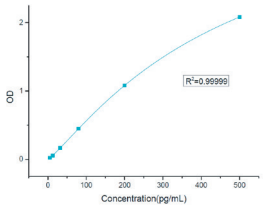
Cat.No. HG-PA001

BlueKit series Protein A ELISA Detection Kit is a specialized kit for quantitative detection of residual Protein A in biological products.

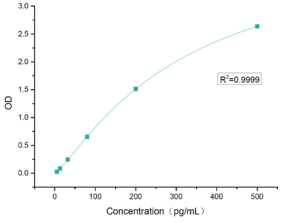
Specification

Assay range: 5.12-500 pg/mL
Limit of Quantitation: 5.12 pg/mL
Accuracy: 80% - 120%

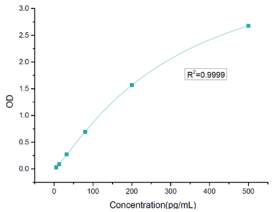
Standard curve



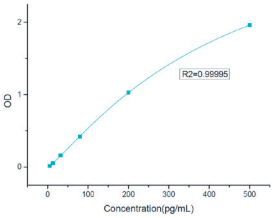
MabSelect SuRe ligands



MabSelect PrismA ligands



Recombinant Protein A (Truking Micro-sphere)



MaXtar® ARPA ligand ProteinA(Bio-Link)

Datasheet

MabSelect SuRe ligands		MabSelect PrismA ligands		Recombinant Protein A (Truking Micro-sphere)		MaXtar® ARPA ligand Protein A	
Concentration (pg/mL)	OD value	Concentration (pg/mL)	OD value	Concentration (pg/mL)	OD value	Concentration (pg/mL)	OD value
500	2.0822	500	2.6761	500	2.6365	500	1.9603
200	1.0807	200	1.5695	200	1.5137	200	1.0287
80	0.4478	80	0.6920	80	0.6550	80	0.4210
32	0.1671	32	0.2735	32	0.2467	32	0.1606
12.8	0.0565	12.8	0.0890	12.8	0.0858	12.8	0.0522
5.12	0.0223	5.12	0.0302	5.12	0.0270	5.12	0.0150

CHO Residual DNA Detection Kit (qPCR)

Overview

Cat.No. HG-CH001

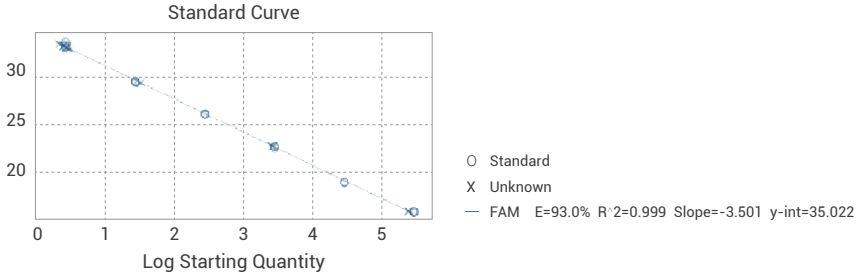
This kit is designed for the quantitative detection of residual CHO DNA content in intermediates, semi-finished products and finished products of various biological products.

This kit adopts the principle of the Taqman probe to quantitatively detect CHO residual DNA in samples. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: 3.00~3.00x10^{5}fg/μL
Limit of quantitation: 3fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
3.00E+05	5.48	15.94	16.08	16.12	16.05	0.59%
3.00E+04	4.48	19.10	19.16	19.17	19.14	0.18%
3.00E+03	3.48	22.72	22.89	22.95	22.86	0.51%
3.00E+02	2.48	26.26	26.38	26.30	26.31	0.23%
3.00E+01	1.48	29.61	29.70	29.79	29.70	0.30%
3.00E+00	0.48	33.88	33.28	33.43	33.53	0.93%
Amplification efficiency						93.0%

CHO HCP ELISA Detection Kit (qPCR)

Overview

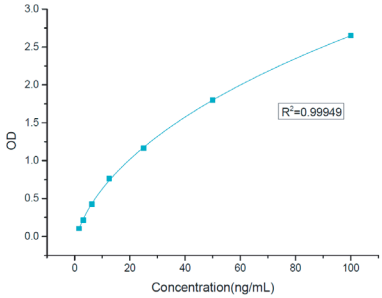
Cat.No. HG-HCP003

BlueKit series CHO HCP ELISA Detection Kit is a specialized kit for the quantitative detection of residual CHO cell-derived host proteins

Specification

Assay range: 1.56-100 ng/mL
Limit of quantitation: 1.56 ng/mL

Standard curve



Datasheet

Standard concentration (ng/mL)	OD value (1)	OD value (2)	Mean value
0.00	0.1229	0.1271	0.1250
1.5625	0.2268	0.2322	0.2295
3.125	0.3405	0.3385	0.3395
6.25	0.5444	0.5538	0.5491
12.5	0.8784	0.8985	0.8885
25	1.2892	1.2889	1.2891
50	1.9245	1.924	1.9243
100	2.7547	2.7934	2.7741

Vero Residual DNA Detection Kit (qPCR)

Overview

Cat.No. HG-VE001

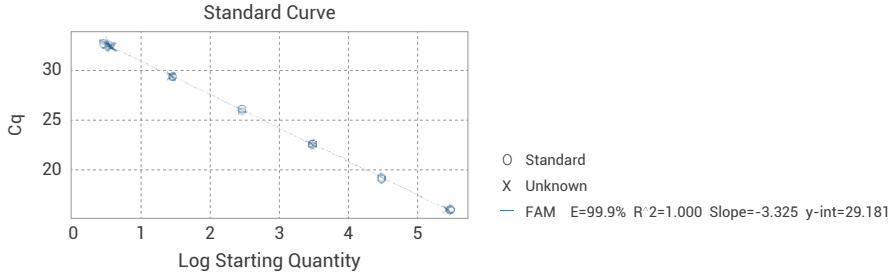
This kit is designed for the quantitative detection of residual Vero host cell DNA in intermediates, semi-finished products and finished products of various biological products.

This kit adopts the principle of Taqman probe to quantitatively detect residual Vero DNA in samples. The kit is a rapid, specific and reliable device, with the minimum detection limit reaching fg level.

Specification

Assay range: 3.00~3.00x10^5fg/μL
Limit of Quantitation: 3fg/μL
Precision: CV% ⩽ 15%

Standard curve



Datasheet

Concentration (fg/μL)	Log10 Concentration	Ct Value(1)	Ct Value(2)	Ct Value(3)	Ct Mean Value	CV
3.00E+05	5.48	11.07	10.99	11.15	11.07	0.72%
3.00E+04	4.48	14.09	14.18	14.31	14.20	0.78%
3.00E+03	3.48	17.68	17.46	17.64	17.59	0.65%
3.00E+02	2.48	20.76	21.07	21.03	20.95	0.80%
3.00E+01	1.48	24.32	24.19	24.22	24.24	0.29%
3.00E+00	0.48	27.84	27.55	27.54	27.64	0.61%
Amplification efficiency						99.9%

Sf9 HCP ELISA Detection Kit

Overview

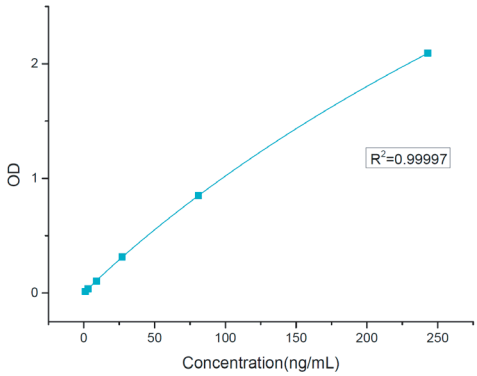
Cat.No. HG-HCP004

BlueKit series Sf9 HCP ELISA Detection Kit is a specialized kit for the quantitative detection of residual insect cell Sf9-derived host proteins.

Specification

Assay range: 3-243 ng/mL
Limit of Quantitation: 3 ng/mL

Standard curve



Datasheet

Standard concentration (ng/mL)	OD value (1)	OD value (2)	Mean value
0.00	0.038	0.038	0.038
1	0.051	0.049	0.050
3	0.074	0.076	0.075
9	0.145	0.139	0.142
27	0.362	0.344	0.353
81	0.883	0.891	0.887
243	2.138	2.119	2.129

CELL THERAPY
INNOVATION INSPIRED

BlueKit™
Powered by Hillgene

Contact us

Jiangsu Hillgene Biopharma Co.,Ltd

A: Building 4 , Yuewang Wisdom Valley , 1463 Wuzhong Avenue, Wuzhong District, Suzhou, China
T: 400-900-1882
E: info@hillgene.com
W: www.hillgene.com / www.bluekitbio.com/

Distributor:

 Ver7.2410