



Rat p53/tumor protein,p53/TP53 ELISA Kit

Product Code	CSB-E08336r
Abbreviation	TP53
Protein Biological Process 1	Apoptosis/Autophagy
Target Name	tumor protein p53
Uniprot No.	P10361
Alias	FLJ92943, LFS1, TRP53, p53, p53 antigen p53 transformation suppressor p53 tumor suppressor phosphoprotein p53 transformation-related protein 53
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Apoptosis
Sample Types	serum, plasma, tissue homogenates
Detection Range	12.5 pg/mL-800 pg/mL
Sensitivity	3.12 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Cancer
Gene Names	Tp53
Tag Info	quantitative
Protein Description	Sandwich

Description

This Rat TP53 ELISA Kit was designed for the quantitative measurement of Rat TP53 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 12.5 pg/mL-800 pg/mL and the sensitivity is 3.12 pg/mL.

Target Details

This gene encodes tumor protein p53, which responds to diverse cellular stresses to regulate target genes that induce cell cycle arrest, apoptosis, senescence, DNA repair, or changes in metabolism. p53 protein is expressed at low level in normal cells and at a high level in a variety of transformed cell lines, where it is believed to contribute to transformation and malignancy. p53 is a DNA-binding protein containing transcription activation, DNA-binding, and oligomerization domains. It is postulated to bind to a p53-binding site and activate expression of downstream genes that inhibit growth and/or invasion,



and thus function as a tumor suppressor. Mutants of p53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of this gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome. Multiple p53 variants due to alternative promoters and multiple alternative splicing have been found. These variants encode distinct isoforms, which can regulate p53 transcriptional activity.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat p53/TP53 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

	Sample	Serum(n=4)
1:1	Average %	100
	Range %	95-108
1:2	Average %	87
	Range %	82-91
1:4	Average %	90
	Range %	85-94
1:8	Average %	92
	Range %	88-96

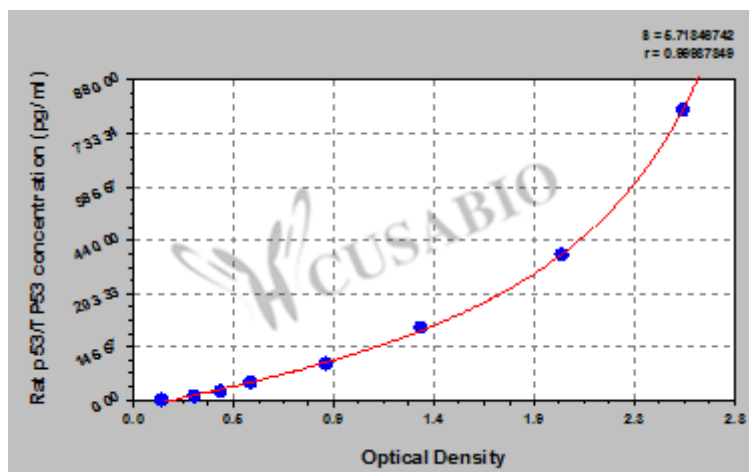
Recovery

The recovery of rat p53/TP53 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	89	84-93
EDTA plasma (n=4)	95	90-100

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
800	2.479	2.615	2.547	2.405
400	2.009	1.974	1.992	1.850
200	1.356	1.330	1.343	1.201
100	0.874	0.929	0.902	0.760
50	0.532	0.571	0.552	0.410
25	0.401	0.425	0.413	0.271
12.5	0.297	0.287	0.292	0.150
0	0.140	0.143	0.142	

Msds

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