Human Tyrosyl-DNA Phosphodiesterase 1(TDP1)ELISA Kit

Product Code	CSB-E17810h
Abbreviation	TDP1
Protein Biological Process 1	DNA damage/DNA repair
Target Name	tyrosyl-DNA phosphodiesterase 1
Uniprot No.	Q9NUW8
Alias	FLJ11090, MGC104252
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	DNA damage
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	62.5 pg/mL-4000 pg/mL
Sensitivity	15.6 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	Epigenetics and Nuclear Signaling
Gene Names	TDP1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human TDP1 ELISA Kit was designed for the quantitative measurement of Human TDP1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 62.5 pg/mL-4000 pg/mL and the sensitivity is 15.6 pg/mL.
Target Details	This protein is involved in repairing stalled topoisomerase I-DNA complexes by catalyzing the hydrolysis of the phosphodiester bond between the tyrosine residue of topoisomerase I and the 3-prime phosphate of DNA. This protein may also remove glycolate from single-stranded DNA containing 3-prime phosphoglycolate, suggesting a role in repair of free-radical mediated DNA

double-strand breaks. This gene is a member of the phospholipase D family and contains two PLD phosphodiesterase domains. Mutations in this gene are associated with the disease spinocerebellar ataxia with axonal neuropathy (SCAN1). While several transcript variants may exist for this gene, the full-length natures of only two have been described to date. These two represent the major variants of this gene and encode the same isoform.

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 human TDP1 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 %	96
	Range %	90-100
1:2	Average %	105
	Range %	100-112
1:4	Average %	92
	Range %	88-96
1:8	Average %	90
	Range %	86-94

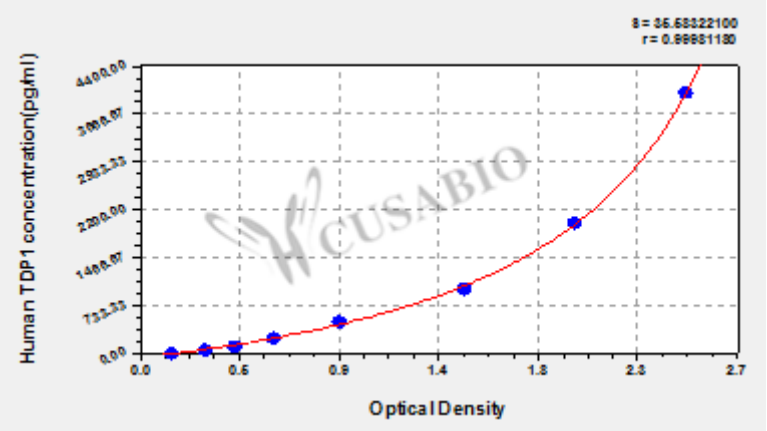
Recovery

The recovery of human TDP1 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)	95	89-99
EDTA plasma (n=4)	91	86-97

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
4000	2.418	2.520	2.469	2.314
2000	1.960	1.976	1.968	1.813
1000	1.443	1.504	1.474	1.319
500	0.884	0.939	0.912	0.757
250	0.593	0.634	0.614	0.459
125	0.426	0.449	0.438	0.283
62.5	0.312	0.309	0.311	0.156
0	0.158	0.152	0.155	

Msds

{"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E17810h.pdf","filename":"MSDS"}}