Human Mothers against decapentaplegic homolog 4,Smad4 ELISA Kit

Product Code	CSB-E12749h
Abbreviation	SMAD4
Protein Biological Process 1	Transcription/Transcription regulation
Target Name	SMAD family member 4
Uniprot No.	Q13485
Alias	DPC4, JIP, MADH4, MAD, mothers against decapentaplegic homolog 4|OTTHUMP00000163548|SMAD, mothers against DPP homolog 4|deleted in pancreatic carcinoma locus 4|mothers against decapentaplegic homolo
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Transcription
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	25 pg/mL-1600 pg/mL
Sensitivity	6.25 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	SMAD4
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human SMAD4 ELISA Kit was designed for the quantitative measurement of Human SMAD4 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 25 pg/mL-1600 pg/mL and the sensitivity is 6.25 pg/mL.
Target Details	This gene encodes a member of the Smad family of signal transduction proteins. Smad proteins are phosphorylated and activated by transmembrane serine-threonine receptor kinases in response to TGF-beta signaling. The

product of this gene forms homomeric complexes and heteromeric complexes with other activated Smad proteins, which then accumulate in the nucleus and regulate the transcription of target genes. This protein binds to DNA and recognizes an 8-bp palindromic sequence (GTCTAGAC) called the Smad-binding element (SBE). The Smad proteins are subject to complex regulation by post-translational modifications. Mutations or deletions in this gene have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome.

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 Smad4 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 %	93
	Range %	89-101
1:2	Average %	92
	Range %	88-100
1:4	Average %	90
	Range %	82-96
1:8	Average %	89
	Range %	82-103

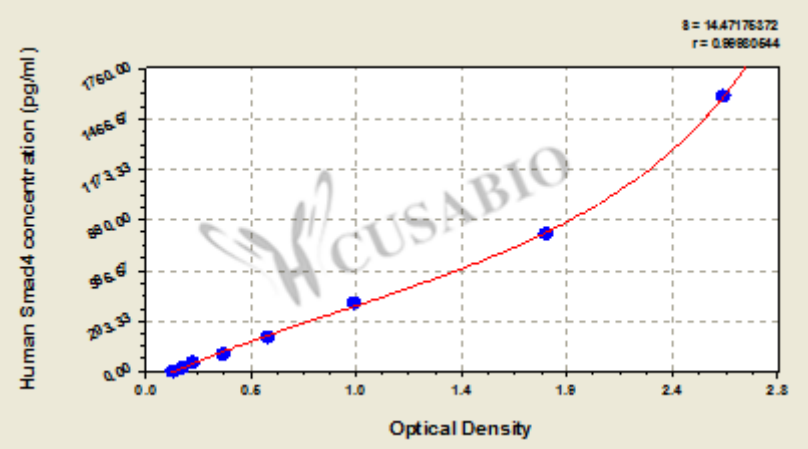
Recovery

The recovery of human Smad4 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)	92	88-96
EDTA plasma (n=4)	95	88-105

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
1600	2.637	2.543	2.590	2.452
800	1.823	1.768	1.796	1.658
400	0.957	0.935	0.946	0.808
200	0.549	0.567	0.558	0.420
100	0.352	0.362	0.357	0.219
50	0.219	0.227	0.223	0.085
25	0.178	0.175	0.177	0.039
0	0.139	0.137	0.138	

Msds

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