Mouse Sonic hedgehog protein(SHH) ELISA kit

Product Code	CSB-EL021266MO
Abbreviation	SHH
Target Name	sonic hedgehog homolog (Drosophila)
Uniprot No.	Q62226
Alias	HHG1, HLP3, HPE3, MCOPCB5, SMMCI, TPT, TPTPS, sonic hedgehog
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	28 pg/mL-1800 pg/mL
Sensitivity	7 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	Developmental Biology
Gene Names	Shh
Tag Info	quantitative
Protein Description	Sandwich
Description	This Mouse SHH ELISA Kit was designed for the quantitative measurement of Mouse SHH protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 28 pg/mL-1800 pg/mL and the sensitivity is 7 pg/mL.
Target Details	This gene encodes a protein that is instrumental in patterning the early embryo. It has been implicated as the key inductive signal in patterning of the ventral neural tube, the anterior-posterior limb axis, and the ventral somites. Of three human proteins showing sequence and functional similarity to the sonic hedgehog protein of Drosophila, this protein is the most similar. The protein is made as a precursor that is autocatalytically cleaved; the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently attaches a cholesterol moiety to the N-terminal product, restricting the N-terminal product to the cell surface and preventing it from freely diffusing throughout the developing embryo. Defects in this protein or in its signalling pathway are a cause of holoprosencephaly (HPE), a disorder in which the developing forebrain fails to correctly separate into right and left hemispheres.

HPE is manifested by facial deformities. It is also thought that mutations in this gene or in its signalling pathway may be responsible for VACTERL syndrome, which is characterized by vertebral defects, anal atresia, tracheoesophageal fistula with esophageal atresia, radial and renal dysplasia, cardiac anomalies, and limb abnormalities. Additionally, mutations in a long range enhancer located approximately 1 megabase upstream of this gene disrupt limb patterning and can result in preaxial polydactyly.

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 mouse SHH 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 %	83
	Range %	80-85
1:2	Average %	91
	Range %	88-93
1:4	Average %	102
	Range %	100-104
1:8	Average %	86
	Range %	82-90

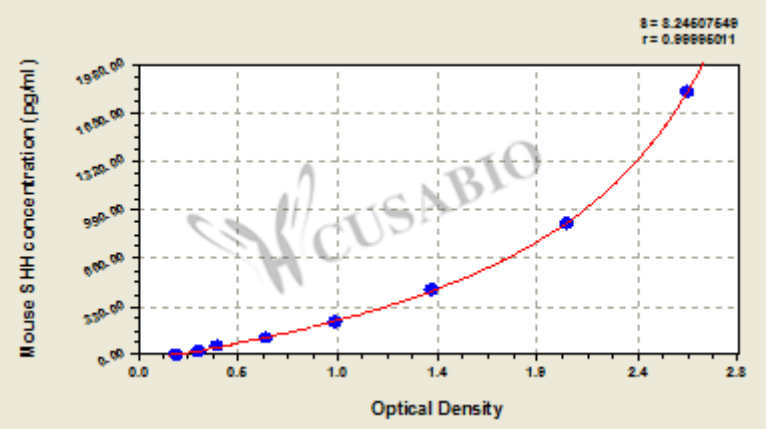
Recovery

The recovery of mouse SHH 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)	104	100-107
EDTA plasma (n=4)	90	87-93

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
1800	2.604	2.568	2.586	2.392
900	2.037	2.004	2.021	1.827
450	1.320	1.468	1.394	1.200
225	0.933	0.945	0.939	0.745
112.5	0.606	0.634	0.620	0.426
56.25	0.382	0.391	0.387	0.193
28	0.300	0.298	0.299	0.105
0	0.196	0.192	0.194	?

Msds

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