Rat Gremlin ELISA Kit

Product Code	CSB-E17688r
Abbreviation	GREM1
Target Name	gremlin 1, cysteine knot superfamily, homolog (Xenopus laevis)
Uniprot No.	O35793
Alias	CKTSF1B1, DAND2, DRM, GREMLIN, IHG-2, MGC126660, PIG2, cysteine knot superfamily 1, BMP antagonist 1|down-regulated in Mos-transformed cells|gremlin 1-like protein|gremlin-1|increased in high glucos
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Sample Types	serum, plasma, tissue homogenates, cell lysates
Detection Range	1.56 ng/mL-100 ng/mL
Sensitivity	0.39 ng/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	Signal Transduction
Gene Names	Grem1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat GREM1 ELISA Kit was designed for the quantitative measurement of Rat GREM1 protein in serum, plasma, tissue homogenates, cell lysates. It is a Sandwich ELISA kit, its detection range is 1.56 ng/mL-100 ng/mL and the sensitivity is 0.39 ng/mL.
Target Details	This gene encodes a member of the BMP (bone morphogenic protein) antagonist family. Like BMPs, BMP antagonists contain cystine knots and typically form homo- and heterodimers. The CAN (cerberus and dan) subfamily of BMP antagonists, to which this gene belongs, is characterized by a C-terminal cystine knot with an eight-membered ring. The antagonistic effect of the secreted glycosylated protein encoded by this gene is likely due to its direct binding to BMP proteins. As an antagonist of BMP, this gene may play a role in regulating organogenesis, body patterning, and tissue differentiation. In mouse, this protein has been shown to relay the sonic hedgehog (SHH) signal from the polarizing region to the apical ectodermal ridge during limb bud outgrowth.

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 gremlin 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 %	105
	Range %	101-109
1:2	Average %	96
	Range %	94-98
1:4	Average %	89
	Range %	83-95
1:8	Average %	93
	Range %	89-97

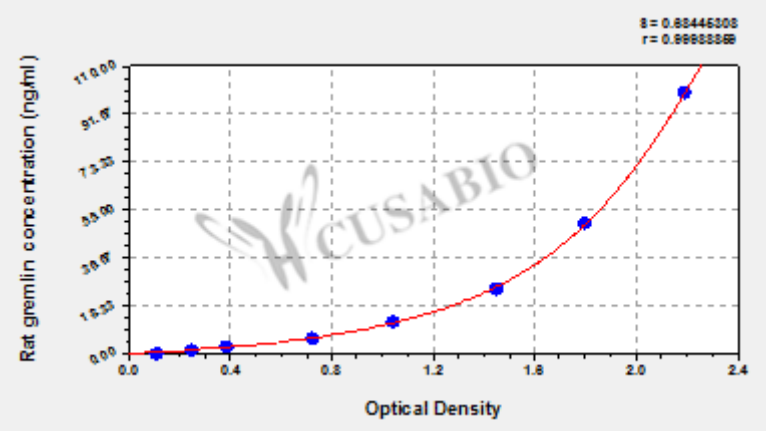
Recovery

The recovery of rat gremlin 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)	101	99-104
EDTA plasma (n=4)	90	85-96

Typical

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



ng/ml	OD1	OD2	Average	Corrected
100	2.210	2.222	2.216	2.094
50	1.798	1.844	1.821	1.699
25	1.432	1.503	1.468	1.346
12.5	1.053	1.062	1.058	0.936
6.25	0.751	0.722	0.737	0.615
3.12	0.391	0.411	0.401	0.279
1.56	0.258	0.266	0.262	0.140
0	0.121	0.123	0.122	?

Msds {"0":{"fileurl":"https://www.cusabio.com/uploadfile/msds/MSDS CSB-E17688r.pdf","filename":"MSDS"}}