Human Noggin(NOG) ELISA kit

Product Code	CSB-EL015917HU
Abbreviation	NOG
Protein Biological Process 1	Developmental Protein
Target Name	noggin
Uniprot No.	Q13253
Alias	SYM1, SYNS1, symphalangism 1 (proximal)
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Chondrogenesis
Sample Types	serum, plasma
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	Developmental Biology
Gene Names	NOG
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human NOG ELISA Kit was designed for the quantitative measurement of Human NOG protein in serum, plasma. 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	The secreted polypeptide, encoded by this gene, binds and inactivates members of the transforming growth factor-beta (TGF-beta) superfamily signaling proteins, such as bone morphogenetic protein-4 (BMP4). By diffusing through extracellular matrices more efficiently than members of the TGF-beta superfamily, this protein may have a principal role in creating morphogenic gradients. The protein appears to have pleiotropic effect, both early in development as well as in later stages. It was originally isolated from Xenopus based on its ability to restore normal dorsal-ventral body axis in embryos that

had been artificially ventralized by UV treatment. The results of the mouse knockout of the ortholog suggest that it is involved in numerous developmental processes, such as neural tube fusion and joint formation. Recently, several dominant human NOG mutations in unrelated families with proximal symphalangism (SYM1) and multiple synostoses syndrome (SYNS1) were identified; both SYM1 and SYNS1 have multiple joint fusion as their principal feature, and map to the same region (17q22) as this gene. All of these mutations altered evolutionarily conserved amino acid residues. The amino acid sequence of this human gene is highly homologous to that of Xenopus, rat and mouse.

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 NOG 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 %	91
	Range %	86-95
1:2	Average %	102
	Range %	97-107
1:4	Average %	91
	Range %	85-97
1:8	Average %	97
	Range %	91-103

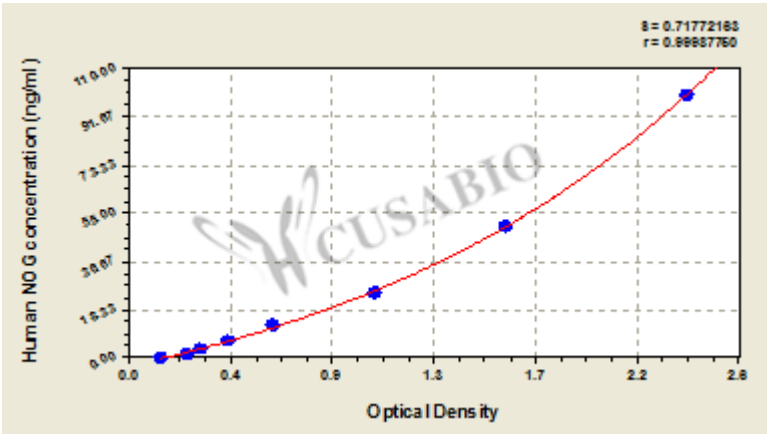
Recovery

The recovery of human NOG 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	89-98
EDTA plasma (n=4)	97	90-100

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	2.378	2.398	2.388	2.242
50	1.601	1.632	1.617	1.471
25	1.054	1.068	1.061	0.915
12.5	0.612	0.638	0.625	0.479
6.25	0.427	0.447	0.437	0.291
3.12	0.305	0.326	0.316	0.170
1.56	0.251	0.269	0.260	0.114
0	0.145	0.147	0.146	

Msds

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