



Human Growth/differentiation factor 5(GDF5)

ELISA kit

Product Code	CSB-EL009349HU
Abbreviation	GDF5
Protein Biological Process 1	Developmental Protein
Target Name	growth differentiation factor 5
Uniprot No.	P43026
Alias	BMP14, CDMP1, LAP4, OS5, SYNS2, OTTHUMP00000030755 cartilage-derived morphogenetic protein-1
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Chondrogenesis
Sample Types	serum, plasma, tissue homogenates
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	Signal Transduction
Gene Names	GDF5
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human GDF5 ELISA Kit was designed for the quantitative measurement of Human GDF5 protein in serum, plasma, tissue homogenates. 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 protein is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are



regulators of cell growth and differentiation in both embryonic and adult tissues. Mutations in this gene are associated with acromesomelic dysplasia, Hunter-Thompson type; brachydactyly, type C; and chondrodysplasia, Grebe type. These associations confirm that the gene product plays a role in skeletal development.

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 GDF5 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 %	103-108
1:2	Average %	93
	Range %	90-97
1:4	Average %	95
	Range %	87-98
1:8	Average %	93
	Range %	91-99

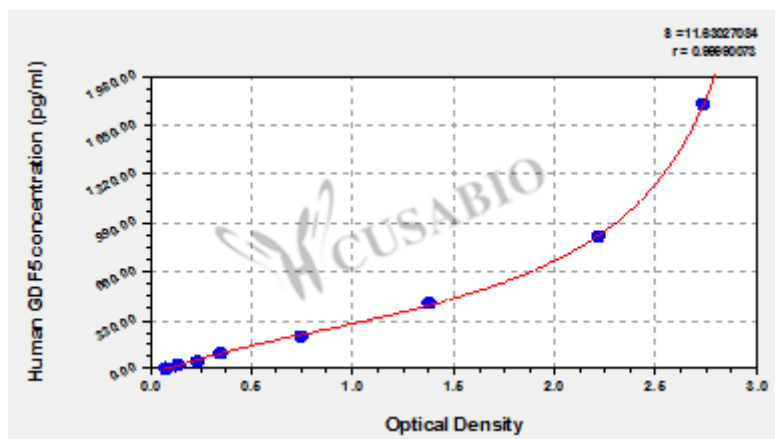
Recovery

The recovery of human GDF5 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	97-105
EDTA plasma (n=4)	92	88-96

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	2.688	2.799	2.744	2.661
900	2.162	2.287	2.225	2.142
450	1.374	1.399	1.387	1.304
225	0.726	0.788	0.757	0.674
112.5	0.352	0.363	0.358	0.275
56	0.237	0.244	0.241	0.158
28	0.144	0.150	0.147	0.064
0	0.080	0.085	0.083	?

Msds

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