Mouse Keratinocyte Growth Factor(KGF/FGF-7) ELISA Kit

Product Code	CSB-E13046m
Abbreviation	FGF7
Target Name	fibroblast growth factor 7 (keratinocyte growth factor)
Uniprot No.	P36363
Alias	HBGF-7, KGF, fibroblast growth factor 7|heparin-binding growth factor 7|keratinocyte growth factor
Product Type	ELISA Kit
Immunogen Species	Mus musculus (Mouse)
Sample Types	serum, plasma, cell culture supernates, tissue homogenates
Detection Range	1.56 pg/mL-100 pg/mL
Sensitivity	0.39 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	Fgf7
Tag Info	quantitative
Protein Description	Sandwich

Description

This mouse FGF7 ELISA kit employs the quantitative sandwich enzyme immunoassay technique to measure the levels of mouse FGF1 in multiple samples, including serum, plasma, cell culture supernates, or tissue homogenates. It also uses the enzyme-substrate chromogenic reaction to visualize and analyze the analyte levels through the color intensity. The intensity of the colored product is in direct proportion to the FGF7 levels in the sample and is measured at 450 nm through a microplate reader.

FGF7 is a mesenchyme-specific heparin-binding growth factor that stimulates cell proliferation, differentiation, migration, and vascular angiogenesis. Mesenchymal-derived FGF7 binds receptors on epithelial to mediate epithelial-mesenchymal interactions in various organs, including the reproductive tract. FGF7 exerts its effect in a paracrine manner and specifically activates the receptor tyrosine kinase FGFR2IIIb. FGF7 binding promotes FGFR2 dimerization, eliciting several signal transduction pathways, including RAS-

MAPK and PI3K-Akt signaling pathways, which play fundamental roles in tumor progression.

Target Details

This protein is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. This protein is a potent epithelial cell-specific growth factor, whose mitogenic activity is predominantly exhibited in keratinocytes but not in fibroblasts and endothelial cells. Studies of mouse and rat homologs of this gene implicated roles in morphogenesis of epithelium, reepithelialization of wounds, hair development and early lung organogenesis.

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 KGF 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)
1:100	Average %	94
	Range %	89-98
1:200	Average %	96
	Range %	91-102
1:400	Average %	90
	Range %	85-96
1:800	Average %	94
	Range %	85-105

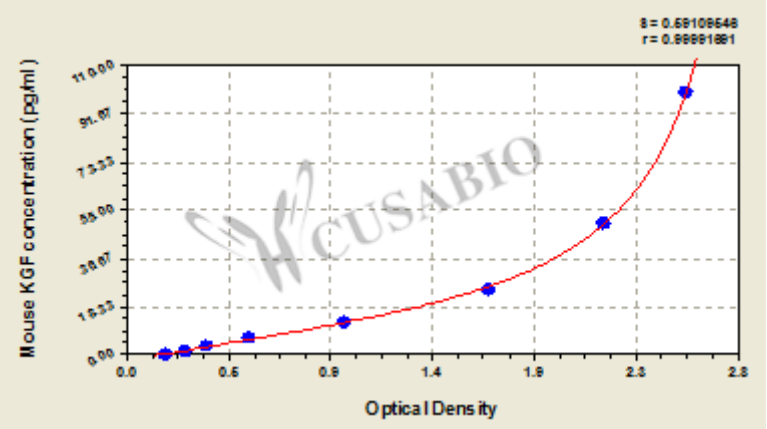
Recovery

The recovery of mouse KGF 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)	91	85-96
EDTA plasma (n=4)	100	95-103

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
100	2.513	2.569	2.541	2.349
50	2.163	2.168	2.166	1.974
25	1.633	1.658	1.646	1.454
12.5	0.992	0.999	0.996	0.804
6.25	0.562	0.571	0.567	0.375
3.12	0.368	0.383	0.376	0.184
1.56	0.272	0.291	0.282	0.090
0	0.190	0.193	0.192	?

Msds

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