

Rat FGF1 ELISA Kit ab213914

1 Image

Overview

Product nameRat FGF1 ELISA Kit

Detection methodColorimetric

PrecisionIntra-assay

Sample	n	Mean	SD	CV%
1	16	101pg/ml	7.97	= 7.9%
2	16	288pg/ml	19.58	= 6.8%
3	16	887pg/ml	37.25	= 4.2%

Inter-assay

Sample	n	Mean	SD	CV%
1	24	96pg/ml	9.12	= 9.5%
2	24	312pg/ml	26.2	= 8.4%
3	24	856pg/ml	37.66	= 4.4%

Sample typeCell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma

Assay typeSandwich (quantitative)

Sensitivity< 10 pg/ml

Range31.2 pg/ml - 2000 pg/ml

Assay time3h 30m

Assay durationMultiple steps standard assay

Species reactivityReacts with: Rat

Product overviewThe Rat FGF1 Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213914) is designed for the quantitative measurement of Rat FGF1 in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA).

The ELISA kit is based on standard sandwich enzyme-linked immune-sorbent assay technology.

A monoclonal antibody from mouse specific for FGF1 has been pre-coated onto 96-well plates. Standards and test samples are added to the wells; a biotinylated detection polyclonal antibody from goat specific for FGF1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB is used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the rat FGF1 amount of sample captured in plate.

Notes Heparin-binding growth factor 1 is a protein that in humans is encoded by the FGF1 gene. The protein encoded by this gene is a member of the fibroblast growth factor(FGF) family. This protein functions as a modifier of endothelial cell migration and proliferation, as well as an angiogenic factor. It acts as a mitogen for a variety of mesoderm- and neuroectoderm-derived cells *in vitro*, thus is thought to be involved in organogenesis. The FGF1 gene was mapped to chromosome 5q31.3-q33.2 by *in situ* hybridization.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml
Adhesive Plate Seal		4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-rat FGF1 coated Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti- rat FGF1 antibody		1 x 100µl
Lyophilized recombinant rat FGF1 standard		2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml
Wash Buffer (25X)		1 x 20ml

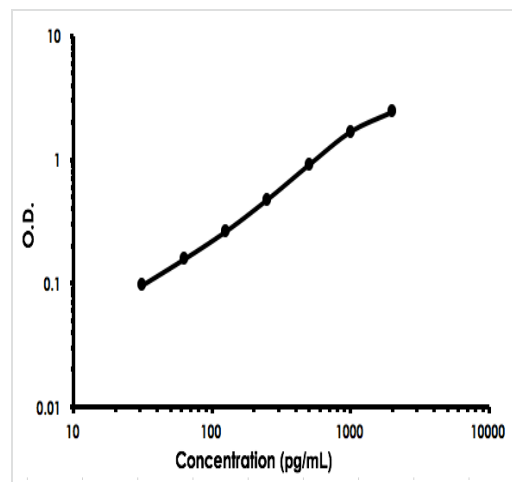
Function The heparin-binding fibroblast growth factors play important roles in the regulation of cell survival, cell division, angiogenesis, cell differentiation and cell migration. They are potent mitogens *in vitro*.

Sequence similarities Belongs to the heparin-binding growth factors family.

Cellular localization Secreted. Cytoplasm. Cytoplasm > cell cortex. Lacks a cleavable signal sequence. Within the cytoplasm, it is transported to the cell membrane and then secreted by a non-classical pathway

that requires Cu(2+) ions and S100A13. Secreted in a complex with SYT1.

Images



Rat FGF1 ELISA Kit (ab213914) Standard Curve

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