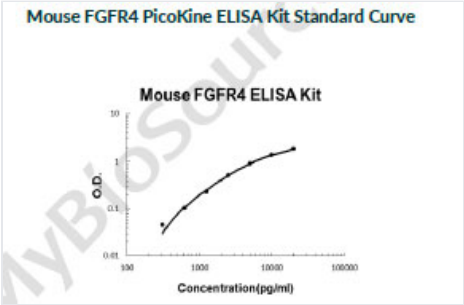
FGFR4 ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	FGFR4, ELISA Kit
Full Product Name	Mouse FGFR4 PicoKine ELISA Kit
Product Gene Name	FGFR4 elisa kit
Product Synonym Names	Mouse FGFR4; Fibroblast growth factor receptor 4; FGFR-4; Protein-tyrosine kinase receptor MPK-11; CD334; Fgfr4; Fgfr-4; Mpk-11
Species Reactivity	Mouse
Samples	Cell culture supernates, serum and plasma (heparin, EDTA, citrate)
Detection Range	312pg/ml-20000pg/ml
Sensitivity	<50pg/ml
Specificity	Natural and recombinant Mouse Fgfr4
Preparation and Storage	Store at 4 degree C for 6 months. Store at -20 degree C for 12 months. Avoid multiple freeze-thaw cycles.
Inter-assay Precision	Inter-Assay Precision (Precision across assays):Three samples of known concentration were tested in separate assays to assess inter-assay precision.
Intra-assay Precision	Intra-Assay Precision (Precision within an assay): Three samples of known concentration were tested on one plate to assess intra-assay precision.
3D Structure	ModBase 3D Structure for Q03142
Production Time	Due to severe delay and raw materials shortage, production time may takes between 5-8 weeks.
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for FGFR4 elisa kit	Principle of the Assay: The Picokine™ Mouse Fgfr4 Pre-Coated ELISA (Enzyme-Linked Immunosorbent Assay) kit is a solid phase immunoassay specially designed to measure Mouse Fgfr4 with a 96-well strip plate that is pre-coated with antibody specific for Fgfr4. The detection antibody is a biotinylated antibody specific for Fgfr4. The capture antibody is a monoclonal antibody from rat, the detection antibody is a biotinylated polyclonal antibody from goat. The kit contains recombinant Mouse Fgfr4 with immunogen:. The kit is analytically validated with ready to use reagents. To measure Mouse Fgfr4, add standards and samples to the wells, then add the biotinylated detection antibody. Wash the wells with PBS or TBS buffer, and add Avidin-Biotin-Peroxidase Complex (ABC-HRP). Wash away the unbounded ABC-HRP with PBS or TBS buffer and add TMB. TMB is substrate to HRP and will be catalyzed to produce a blue color product, which changes into yellow after adding acidic stop solution. The density of the yellow product is linearly proportional to Mouse Fgfr4 in the sample. Read the density of the yellow product in each well using a plate reader, and benchmark the sample wells' readings against the standard curve to determine the concentration of Mouse Fgfr4 in the sample.!!Background/Introduction: Fibroblast growth factor receptor 4 is a protein that in humans is encoded by the FGFR4 gene. It is mapped to 13 B1; 13 29.8 cM. FGFR4 has also been designated as CD334 (cluster of differentiation 334). The protein encoded by this gene is a member of the fibroblast growth factor receptor family, where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein would consist of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. The genomic organization of this gene, compared to members 1-3, encompasses 18 exons rather than 19 or 20. Although alternative splicing has been observed, there is no evidence that the C-terminal half of the IgIII domain of this protein varies between three alternate forms, as indicated for members 1-3. This particular family member preferentially binds acidic fibroblast growth factor and, although its specific function is unknown, it is overexpressed in gynecological tumor samples, suggesting a role in breast and ovarian tumorigenesis.

Other Notes	Small volumes of FGFR4 elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for FGFR4 purchase	MBS1752689 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the FGFR4, ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing FGFR4. The ELISA analytical biochemical technique of the MBS1752689 kit is based on FGFR4 antibody-FGFR4 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect FGFR4 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, FGFR4. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of FGFR4 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for FGFR4. It may not necessarily be applicable to this product.

NCBI GI #	112293260
NCBI GeneID	14186
NCBI Accession #	NP_032037.2
UniProt Primary Accession #	Q03142
UniProt Related Accession #	Q03142
GenBank Nucleotide #	NP_032037.2
NCBI Official Full Name	fibroblast growth factor receptor 4
NCBI Official Synonym Full Names	fibroblast growth factor receptor 4
NCBI Official Symbol	Fgfr4
NCBI Official Synonym Symbols	Fgfr-4
UniProt Protein Name	Fibroblast growth factor receptor 4
UniProt Synonym Protein Names	Protein-tyrosine kinase receptor MPK-11; CD_antigen: CD334
Protein Family	Fibroblast growth factor receptor
UniProt Gene Name	Fgfr4
UniProt Synonym Gene Names	Fgfr-4; Mpk-11; FGFR-4
UniProt Entry Name	FGFR4_MOUSE
NCBI Protein Information	fibroblast growth factor receptor 4

UniProt Comments for FGFR4	FGFR4: a tyrosine-kinase receptor that acts as cell-surface receptor for fibroblast growth factors and plays a role in the regulation of cell proliferation, differentiation and migration, and in regulation of lipid metabolism, bile acid biosynthesis, glucose uptake, vitamin D metabolism and phosphate homeostasis. Required for normal down-regulation of the expression of CYP7A1, the rate-limiting enzyme in bile acid synthesis, in response to FGF19. Phosphorylates PLCG1 and FRS2. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of the MAP kinase and AKT signaling pathways. Promotes SRC-dependent phosphorylation of the matrix protease MMP14 and its lysosomal degradation. FGFR4 signaling is down-regulated by receptor internalization and degradation; MMP14 promotes internalization and degradation of FGFR4. Mutations that lead to constitutive kinase activation or impair normal FGFR4 inactivation lead to aberrant signaling. Two isoforms of the human protein are formed by alternative splicing. This description may include information from UniProtKB Protein type: EC 2.7.10.1; Protein kinase, tyrosine (receptor); Protein kinase, TK; Kinase, protein; Membrane protein, integral; TK group; FGFR family Cellular Component: nucleoplasm; Golgi apparatus; transport vesicle; membrane; endoplasmic reticulum; integral to plasma membrane; cytoplasm; plasma membrane; integral to membrane; intercellular junction; endosome Molecular Function: transferase activity; heparin binding; protein binding; fibroblast growth factor binding; fibroblast growth factor receptor activity; protein-tyrosine kinase activity; transferase activity, transferring phosphorus-containing groups; nucleotide binding; transmembrane receptor protein tyrosine kinase activity; kinase activity; ATP binding; protein kinase activity Biological Process: cell migration; fibroblast growth factor receptor signaling pathway; regulation of lipid metabolic process; peptidyl-tyrosine phosphorylation; positive regulation of proteolysis; protein amino acid autophosphorylation; positive regulation of metalloenzyme activity; glucose homeostasis; protein amino acid phosphorylation; induction of an organ; positive regulation of cell proliferation; phosphate ion homeostasis; phosphorylation; lung development
Research Articles on FGFR4	**1.** our data highlight a role of FGF23/FGFR4 signaling in the regulation of cardiac remodeling and function, and indicate that pharmacological interference with cardiac FGF23/FGFR4 signaling might protect from CKD- and age-related LVH.
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