

FGF-R4
Catalog # PVGS1612**Specification**

FGF-R4 - Product Information

Primary Accession [Q03142](#)
Species
Mouse

Sequence
Leu19-Asp366

Purity
> 90% as analyzed by SDS-PAGE

Endotoxin Level
< 1 EU/ µg of protein by gel clotting method

Expression System
CHO

Formulation **Lyophilized from a 0.2 µm filtered solution in PBS.**

Reconstitution
It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH₂O or PBS up to 100 µg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

FGF-R4 - Additional Information

Gene ID 14186

Other Names
Fibroblast growth factor receptor 4, FGFR-4, 2.7.10.1, Protein-tyrosine kinase receptor MPK-11, CD334, Fgfr4, Fgfr-4, Mpk-11

Target Background
Fibroblast growth factor receptor 4(FGFR4) also known as CD334 (cluster of differentiation 334) is a member of the fibroblast growth factor receptor family, where amino acid sequence is highly conserved between members and throughout evolution. 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.

FGF-R4 - Protein Information

Name Fgfr4

Synonyms Fgfr-4, Mpk-11

Function

Tyrosine-protein kinase that acts as a 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 RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. 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. Plays a role in postnatal lung development. May be involved in the development of skeletal muscle cell lineages.

Cellular Location

Cell membrane; Single-pass type I membrane protein Endosome. Endoplasmic reticulum
Note=Internalized from the cell membrane to recycling endosomes, and from there back to the cell membrane.

Tissue Location

Isoform 1 and isoform 2 are expressed in lung and proliferating myoblasts and myotubes of primary myogenic cells (at protein level). Isoform 1 and isoform 2 are expressed in liver, muscle, spleen, heart, lung, kidney and in primary myogenic cells

FGF-R4 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

FGF-R4 - Images