



Recombinant Protein Technical Manual

Recombinant Mouse FGFR1/FGFR5 Protein (His Tag)(Active)
RPES3508

Product Data:

Product SKU: RPES3508

Size: 50µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_473412.1

Protein Information:

Molecular Mass: 40.4 kDa

AP Molecular Mass: 55-60 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA.1. Immobilized mouse at 10 µg/ml (100 µl/well) can bind mouse FGFR5. The EC50 of mouse FGFR5 is 0.34 µg/ml.2. Immobilized human FGF1 at 10 µg/ml (100 µl/well) can bind mouse FGFR5 with a linear range o

Purity: > 90 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: FGFR5;FGFR5beta;FGFR5gamma

Immunogen Information:

Sequence: Met 1-Pro 374

Background:

Fibroblast growth factor receptor-like 1 (FGFRL1) also known as Fibroblast growth factor receptor 5 (FGFR5), is a member of the fibroblast growth factor receptor (FGFR) 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. A unique feature of FGFRL1/FGFR5 is that it does not contain an intracellular tyrosine kinase domain. Some muscle types, including the muscles of the tongue and the diaphragm, express FGFRL1/FGFR5 at relatively high level. In contrast, the heart and the skeletal muscles of the limbs, as well as many other organs (brain, lung, liver, kidney, gut) express Fgfr1 only at basal level. It is conceivable that FGFRL1/FGFR5 interacts with other Fgfrs, which are expressed in cartilage and muscle, to modulate FGF signaling.