Recombinant Mouse FGFRL1/FGFR5 Protein (His Tag)

Catalog No. PKSM040824

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description		
Synonyms	FGFR5;FGFR5beta;FGFR5gamma	
Species	Mouse	
Expression Host	HEK293 Cells	
Sequence	Met 1-Pro 374	
Accession	NP_473412.1	
Calculated Molecular Weight	40.4 kDa	
Observed molecular weight	55-60 kDa	
Tag	C-His	
Bioactivity	 Immobilized mouse at 10 μg/ml (100 μl/well) can bind mouse FGFR5. The EC50 of mouse FGFR5 is 0.34 μg/ml. Immobilized human FGF1 at 10 μg/ml (100 μl/well) can bind mouse FGFR5 with a linear range of 0.08-2 μg/ml. Immobilized human bFGF at 5 μg/ml (100 μl/well) can bind mouse FGFR5. The EC50 of mouse FGFR5 is 0.22 μg/ml. 	
Properties		
Purity	> 90 % as determined by reducing SDS-PAGE.	
Endotoxin	< 1.0 EU per μ g of the protein as determined by the LAL method.	
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.	
Reconstitution	Please refer to the printed manual for detailed information.	
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Data

KDa	MK	R
116	-	1000
66.2		
45.0	-	112
35.0	-	
25.0	-	
18.4	-	
14.4	-	

> 90 % as determined by reducing SDS-PAGE.

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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 Fgfrl1 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.