

## Recombinant Mouse FGFR3 Protein (His Tag)

**Catalog No.** PKSM040941

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

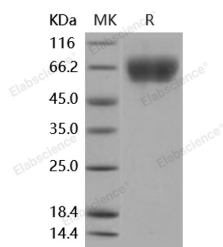
### Description

<b>Synonyms</b>	CD333;Fgfr-3;Flg-2;FR3;HBGFR;Mfr3;sam3
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met 1-Tyr 367
<b>Accession</b>	NP_032036.2
<b>Calculated Molecular Weight</b>	37.0 kDa
<b>Observed molecular weight</b>	70-80 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Measured by its ability to inhibit FGF acidic dependent proliferation of Balb/c3T3 mouse embryonic fibroblasts. The ED50 for this effect is typically 0.3-4 µg/mL.

### Properties

<b>Purity</b>	> 98 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



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### Background

FGFR3, also known as CD333, is a member of the fibroblast growth factor receptor (FGFR) family, with its amino acid

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sequence being highly conserved between members and among divergent species. FGFR family members differ from one another in their ligand affinities and tissue distribution. FGFRs are transmembrane catalytic receptors that have intracellular tyrosine kinase activity. Mutations in FGFR genes are the cause of several human developmental disorders characterized by skeletal abnormalities such as achondroplasia, and upregulation of FGFR expression may lead to cell transformation and cancer. FGFR3, 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 FGFR3 interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. FGFR3 binds acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in FGFR3 gene lead to craniosynostosis and multiple types of skeletal dysplasia. Three alternatively spliced transcript variants that encode different protein isoforms have been described. CD333 is the receptor for acidic and basic fibroblast growth factors.