

Recombinant Human FGFR3 Protein, C-hFc-tagged

Product Information

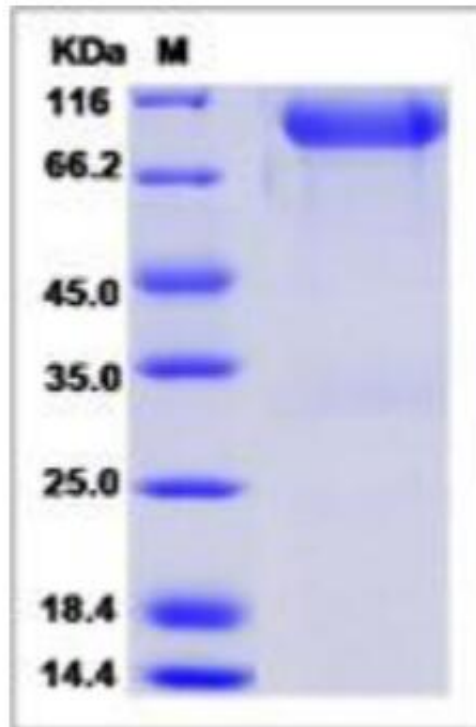
Cat	IMP-4500
Official Symbol	FGFR3
Product Overview	Recombinant human FGFR3(alpha(IIIb)) (NP_001156685.1) (Met1-Gly377) was expressed with the Fc region of human IgG1 at the C-terminus.
Description	<p>FGFR3, also known as CD333, is a member of the fibroblast growth factor receptor (FGFR) family, with its amino acid 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.</p>
Expression System	HEK293
Species	Human
Tag	C-hFc
Predicted N Terminal	Glu 23
Form	Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and 0.01% Tween80.
Molecular Mass	The recombinant human FGFR3(alpha(IIIb)) consists 593 amino acids and predicts a molecular mass of 65.3 kDa.
Protein length	Met1-Gly377
Endotoxin	< 1.0 EU/μg of the protein as determined by the LAL method
Purity	> 95 % as determined by SDS-PAGE

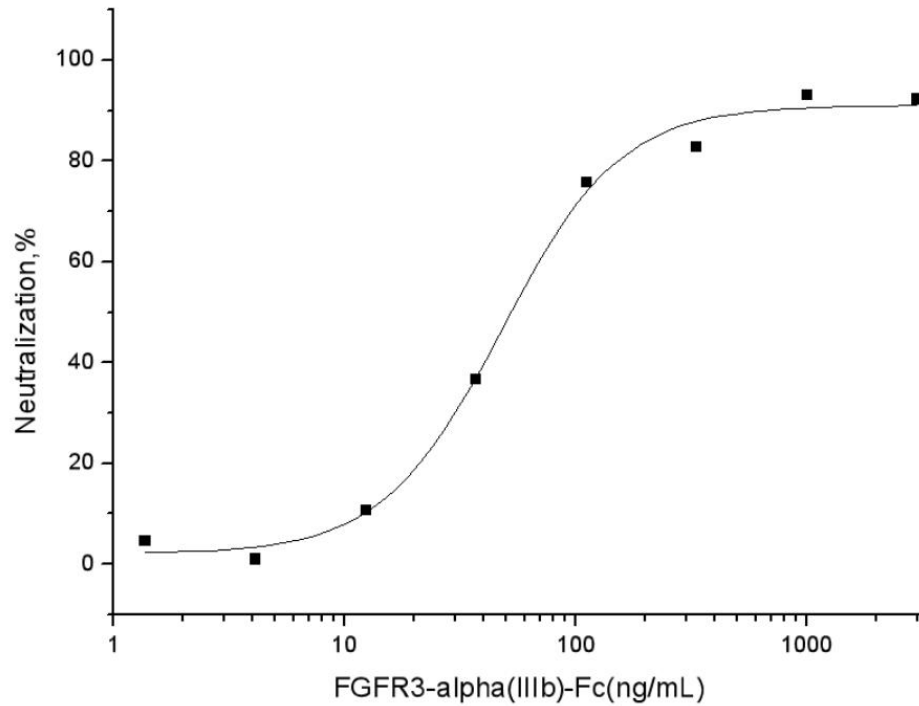
Storage

Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

SDS-PAGE**Bioactivity-Cell based assay 1**



Measured by its ability to inhibit FGF-acidic dependent proliferation of Balb/c 3T3 mouse fibroblasts. The ED50 for this effect is typically 20-120 ng/mL