

FGFR1 active protein

FGFR1 Protein, Mouse, Recombinant (hFc Tag)

CATALOG #
AAA258140

HOST
HEK293 Cells

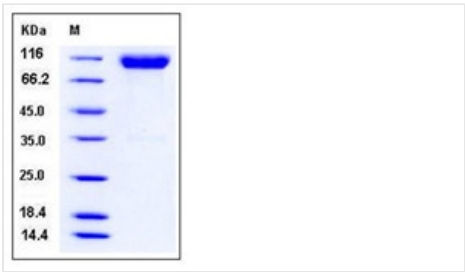
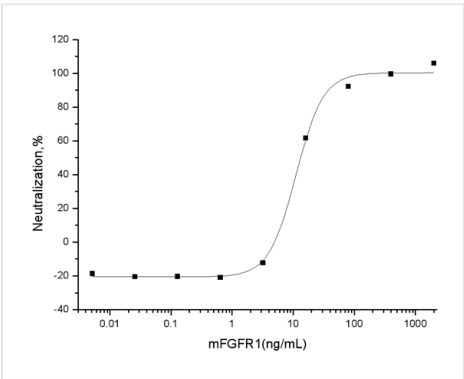
PRODUCT SYNONYMS

FGFR1; FGFR1 Protein; Mouse; Recombinant (hFc Tag); Mouse FGFR1/CD331 Protein (Fc Tag); AW208770 Protein; bFGF-R-1 Protein; c-fgr Protein; Eask Protein; Fgfr-1 Protein; FLG Protein; Flt-2 Protein; Hspy Protein; MFR Protein; fibroblast growth factor receptor 1; FGFR1 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>97% as determined by SDS-PAGE
Form/Format	Lyophilized from sterile PBS, pH7.4. Normally 5%-8% trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Glu37 6
Species	Mouse
Activity	Measured by its ability to inhibit mouse FGF acidic (aFGF/FGF1) dependent proliferation of Balb/C 3T3 mouse fibroblasts. The ED50 for this effect is typically 6-25ng/mL in the presence of 0.5ng/mL of mouse FGF acidic (aFGF/FGF1).
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Arg 22
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the extracellular domain (Met 1-Glu 376) of mouse FGFR1 isoform 1 (P16092-1) was as fused with the Fc region of human IgG1 at the C-terminus.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice.

IMAGES



SDS-PAGE

Application Data
Measured by its ability to inhibit mouse FGF acidic (aFGF/FGF1) dependent proliferation of Balb/C 3T3 mouse fibroblasts. The ED50 for this effect is typically 6-25 ng/mL in the presence of 0.5 ng/mL of mouse FGF acidic (aFGF/FGF1).

ADDITIONAL INFORMATION

Related Product Information for FGFR1 active protein	Background: FGFR1, also known as CD331, belongs to the fibroblast growth factor receptor subfamily where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. Fibroblast growth factors (FGFs)(FGF1 - 10 and 16 - 23) are mitogenic signaling molecules that have roles in angiogenesis, wound healing, cell migration, neural outgrowth and embryonic development. FGFs bind heparan sulfate glycosaminoglycans, which facilitates dimerization (activation) of FGF receptors. FGFR1 is a full-length representative protein consists 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 FGFR1 interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. This particular family member binds both acidic and basic fibroblast growth factors and is involved in limb induction. CD331 can be detected in astrocytoma, neuroblastoma and adrenal cortex cell lines. Some isoforms are detected in foreskin fibroblast cell lines, however isoform 17, isoform 18 and isoform 19 are not detected in these cells. Defects in FGFR1 are a cause of Pfeiffer syndrome, idiopathic hypogonadotropic hypogonadism, Kallmann syndrome type 2, osteoglophonic dysplasia and trigonocephaly non-syndromic.
Product Categories/Family for FGFR1 active protein	Cancer Drug Targets Receptor Tyrosine Kinases (RTKs)
References	Schlessinger J, et al. (2000) Crystal structure of a ternary FGF-FGFR-heparin complex reveals a dual role for heparin in FGFR binding and dimerization. Mol Cell. 6(3):743-50. Doda© C, et al. (2007) Novel FGFR1 sequence variants in Kallmann syndrome, and genetic evidence that the FGFR1c isoform is required in olfactory bulb and palate morphogenesis. Hum Mutat. 28(1): 97-8. Kim HG, et al. (2005) Hypogonadotropic hypogonadism and cleft lip and palate caused by a balanced translocation producing haploinsufficiency for FGFR1. J Med Genet. 42(8):666-72.

NCBI AND UNIPROT INFORMATION

NCBI GI #	120952698
NCBI GeneID	14182
NCBI Accession #	NP_001073377.1
NCBI GenBank Nucleotide #	NM_001079908.2
UniProt Accession #	P16092; Q01736; Q60830; Q61562; Q80T10; Q8CFK8; Q9QZM7; E9Q2P4
Molecular Weight	91,669 Da
NCBI Official Full Name	fibroblast growth factor receptor 1 isoform 2
NCBI Official Synonym Full Names	fibroblast growth factor receptor 1

NCBI Official Symbol	Fgfr1
NCBI Official Synonym Symbols	FLG; MFR; Eask; Hspy; Flt-2; c-fgr; Fgfr-1; AW208770; bFGF-R-1
NCBI Protein Information	fibroblast growth factor receptor 1
UniProt Protein Name	Fibroblast growth factor receptor 1
UniProt Gene Name	Fgfr1
UniProt Synonym Gene Names	Flg; FGFR-1; bFGF-R-1
UniProt Entry Name	FGFR1_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/hek293-active-protein/fgfr1/258140>