

FGFR2 active protein

FGFR2 Protein, Human, Recombinant (alpha IIIb, hFc Tag)

CATALOG #
AAA258054

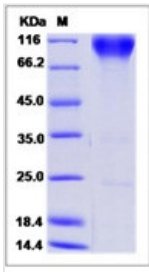
HOST
HEK293 Cells

PRODUCT SYNONYMS

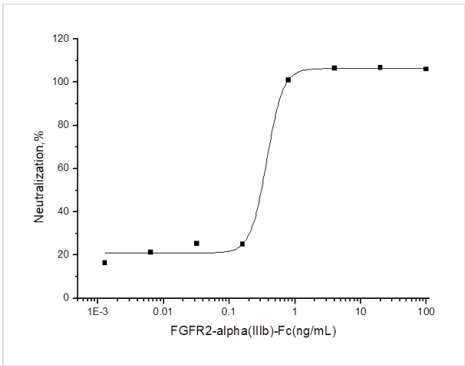
FGFR2; FGFR2 Protein; Human; Recombinant (alpha IIIb; hFc Tag); Human FGFR2/CD332 Protein (alpha(IIIb); Fc Tag); BBDS Protein; BEK Protein; BFR-1 Protein; CD332 Protein; CEK3 Protein; CFD1 Protein; ECT1 Protein; JWS Protein; K-SAM Protein; KGFR Protein; TK14 Protein; TK25 Protein; fibroblast growth factor receptor 2; FGFR2 active protein

PRODUCT SPECIFICATIONS

Host	HEK293 Cells
Purity/Purification	>95% 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-Glu378
Species	Human
Activity	1. Measured by its ability to inhibit FGF-acidic dependent proliferation of Balb/c 3T3 mouse fibroblasts. The ED50 for this effect is typically 0.5-4ng/mL. 2. Measured by its ability to bind recombinant Fc-FGF10 in a functional ELISA.
Endotoxin	<1.0EU per ug protein as determined by the LAL method.
Predicted N Terminal	Arg 22
Tag	C-human IgG1-Fc
Protein Construction	A DNA sequence encoding the human FGFR2(alpha(IIIb))(NP_001138385.1)(Met1-Glu378) was expressed 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.



Application Data



SDS-PAGE
Measured by its ability to inhibit FGF-acidic dependent proliferation of Balb/c 3T3 mouse fibroblasts. The ED50 for this effect is typically 0.5-4 ng/mL.

ADDITIONAL INFORMATION

Related Product Information for FGFR2 active protein	Background: FGFR2, also known as CD332, belongs to the fibroblast growth factor receptor subfamily where amino acid sequence is highly conserved between members and throughout evolution. FGFR2 acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation, migration and apoptosis, and in the regulation of embryonic development. It is required for normal embryonic patterning, trophoblast function, limb bud development, lung morphogenesis, osteogenesis and skin development. FGFR2 plays an essential role in the regulation of osteoblast differentiation, proliferation and apoptosis, and is required for normal skeleton development. It also promotes cell proliferation in keratinocytes and immature osteoblasts, but promotes apoptosis in differentiated osteoblasts. FGFR2 signaling is down-regulated by ubiquitination, internalization and degradation. Mutations that lead to constitutive kinase activation or impair normal CD332 maturation, internalization and degradation lead to aberrant signaling. Over-expressed FGFR2 promotes activation of STAT1. Defects in CD332 are the cause of Crouzon syndrome, Jackson-Weiss syndrome, Apert syndrome, Pfeiffer syndrome, Beare-Stevenson cutis gyrata syndrome, familial scaphocephaly syndrome, lacrimo-auriculo-dento-digital syndrome and Antley-Bixler syndrome without genital anomalies or disordered steroidogenesis.
Product Categories/Family for FGFR2 active protein	Receptor Tyrosine Kinases (RTKs) Cancer Drug Targets
References	Marie PJ, et al. (2003) Regulation of human cranial osteoblast phenotype by FGF-2, FGFR-2 and BMP-2 signaling. <i>Histol.</i> 17(3):877-85. Park WJ, et al. (1996) Novel FGFR2 mutations in Crouzon and Jackson-Weiss syndromes show allelic heterogeneity and phenotypic variability. <i>Hum Mol Genet.</i> 4(7):1229-33. Orr-Urtreger A, et al. (1993) Developmental localization of the splicing alternatives of fibroblast growth factor receptor-2 (FGFR2). <i>Dev Biol.</i> 158(2):475-86.

NCBI AND UNIPROT INFORMATION

Molecular Weight	The recombinant human FGFR2(alpha(IIIb)) consists 595 amino acids and predicts a molecular mass of 66.3kDa.
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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.