Recombinant Human FGFR2/CD332 Protein (His Tag)

Catalog Number: PKSH031407

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

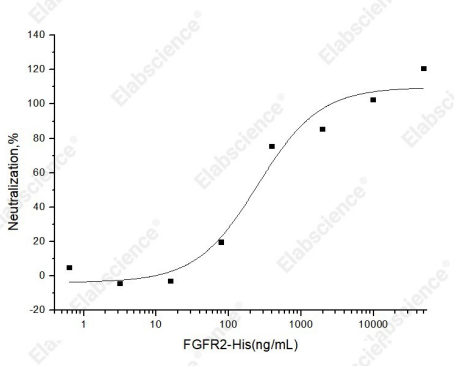
Description

Species	Human
Source	HEK293 Cells-derived Human FGFR2/CD332 protein Met 1-Glu 377, with an C-terminal His
Calculated MW	41 kDa
Observed MW	65-75 kDa
Accession	NP_000132.3
Bio-activity	Measured by its ability to inhibit FGF acidic dependent proliferation of Balb/c3T3 mouse embryonic fibroblasts. The ED_{50} for this effect is typically 200-400 ng/mL.

Properties

Purity	> 97% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg 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% Tween 80 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.

Data



Measured by its ability to inhibit FGF acidic dependent proliferation of Balb/c3T3 mouse embryonic fibroblasts. The ED_{50} for this effect is typically 0.2-1 μg/mL.

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 imature 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 CD3322 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.

Toll-free: 1-888-852-8623
Tel: 1-832-243-6086
Fax: 1-832-243-6017
Web: www.elabscience.com
Email: techsupport@elabscience.com