



Recombinant Protein Technical Manual

Recombinant Human FGFR2/CD332 Protein (aa 400-821, His & GST Tag)(Active)

RPES1437

Product Data:

Product SKU: RPES1437

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_000132.3

Protein Information:

Molecular Mass: 75.7 kDa

AP Molecular Mass: 68 kDa

Tag: N-His & GST

Bio-activity: 1. The specific activity was determined to be 28 nmol/min/mg using Poly(Glu:Tyr) 4:1 as substrate. 2. Measured by its binding ability in a functional ELISA. Immobilized recombinant human FGFR2 (aa 400-821) at 10 µg/ml (100 µl/well) can bind biotinylated human FGF acidic with a linear range of 15.6-250 ng/ml. 3. Measured by its binding ability in a functional ELISA. Immobilized recombinant recombinant human FGFR2 (aa 400-821) at 10 µg/ml (100 µl/well) can bind biotinylated human FGF basic with a linear range of 0.16.25 µg/ml.

Purity: > 92 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% gly

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: BBDS;BEK;BFR;CD332;CEK3;CFD1;ECT1;JWS;K-SAM;KGFR;TK14;TK25

Immunogen Information:

Sequence: Met 400-Thr 821

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 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.