

Recombinant Rat FGFR4 Protein(His Tag)

Catalog Number: PDMR100055

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

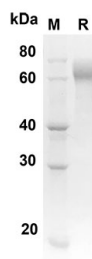
Description

Species	Rat
Source	Mammalian-derived Rat FGFR4 protein Phe17-Asp367, with an C-terminal His
Calculated MW	38.5 kDa
Observed MW	60-80 kDa
Accession	Q498D6
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg 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 a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Rat FGFR4 proteins, 2 µg/lane of Recombinant Rat FGFR4 proteins was resolved with an SDS-PAGE under reducing conditions, showing bands at 38.5KD

Background

Fibroblast growth factor receptor 4 (FGFR4) also known as CD334 antigen or tyrosine kinase related to fibroblast growth factor receptor, is a member of the fibroblast growth factor receptor family, 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. 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 FGFR4/CD334 interacts with an fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. FGFR4/CD334 preferentially binds acidic fibroblast growth factor and, although its specific function is unknown, it is overexpressed in gynecological tumor samples, suggesting a role in breast and ovarian tumorigenesis. FGFR4/CD334 signaling is down-regulated by receptor internalization and degradation, MMP14 promotes internalization and degradation of FGFR4/CD334. Mutations in FGFR4/CD334 lead to constitutive kinase activation or impair normal FGFR4 inactivation lead to aberrant signaling.