# Rhesus FGFR4 / FGF Receptor 4 Protein (His Tag)

**Catalog Number:** **90134-C08H**

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Biological Solution Specialist

## General Information

**Gene Name Synonym:**

CD334; JTK2; TKF; Fgfr-4

**Protein Construction:**

A DNA sequence encoding the rhesus FGFR4 (XP_001087243.1) (Met1-Asp369) was expressed with a polyhistidine tag at the C-terminus.

**Source:** Rhesus

**Expression Host:** Human Cells

## QC Testing

**Purity:** > 85 % as determined by SDS-PAGE

**Endotoxin:**

< 1.0 EU per μg of the protein as determined by the LAL method

**Stability:**

Samples are stable for up to twelve months from date of receipt at -70 ℃

**Predicted N terminal:** Leu 22

**Molecular Mass:**

The recombinant rhesus FGFR4 comprises 359 amino acids and has a calculated molecular mass of 40 KDa.

**Formulation:**

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

**Storage:**

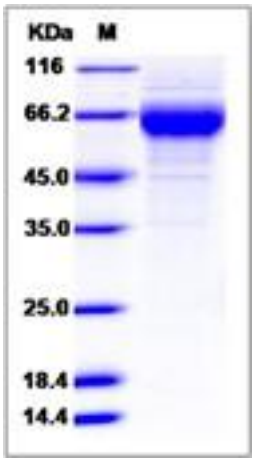
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

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 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.

**References**

1.Hart KC, *et al.* (2000) Transformation and Stat activation by derivatives of FGFR1, FGFR3, and FGFR4. Oncogene. 19(29): 3309-20.
2.Xie MH, *et al.* (1999) FGF-19, a novel fibroblast growth factor with unique specificity for FGFR4. Cytokine. 11(10): 729-35.
3.Yu C, *et al.* (2000) Elevated cholesterol metabolism and bile acid synthesis in mice lacking membrane tyrosine kinase receptor FGFR4. J Biol Chem. 275(20): 15482-9.