## Recombinant Rat FGFR4/CD334 Protein (Fc Tag)

## Catalog Number: PKSR030366

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

Description	
Species	Rat
Source	HEK293 Cells-derived Rat FGFR4/CD334 protein Met 1-Asp 367, with an C-terminal
	hFc
Calculated MW	66.0 kDa
Observed MW	110 kDa
Accession	Q498D6
<b>Bio-activity</b>	1. Immobilized human FGF18 at 10 $\mu$ g/mL (100 $\mu$ l/well) can bind Rat FGFR4, The EC
	$_{50}$ of Rat FGFR4 is 1. 17 µg/mL. 2. Immobilized mouse FGF18 at 10 µg/mL (100
	$\mu$ l/well) can bind Rat FGFR4, The EC <sub>50</sub> of Rat FGFR4 is 0.44 $\mu$ g/mL. 3. Immobilized
	human bFGF at 10 $\mu$ g/mL (100 $\mu$ l/well) can bind Rat FGFR4, The EC <sub>50</sub> of Rat FGFR4
	is 0.163 µg/mL.
Properties	
Purity	> 90 % 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 $< -20^{\circ}$ 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	

KDa	М
116	
66.2	- 77
45.0	_
35.0	
25.0	-
18.4 14.4	=

> 90 % as determined by reducing SDS-PAGE.

## Background

## **Elabscience**®

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.