## FGFR-2 Protein, Mouse (HEK293, Fc)

Cat. No.: HY-P76339

Synonyms: Fibroblast growth factor receptor 2; FGFR-2; KSAM; KGFR; CD332; BEK

Species: Source: HEK293

Accession: E9Q5C3 (R22-E263)

Gene ID: 14183

Molecular Weight: Approximately 89.9 kDa.

PROPERTIES	
Biological Activity	The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 $\mu g/mL$ in ddH $_2$ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

## **DESCRIPTION**

Background

FGFR2, also known as CD332 (differentiated cluster 332), is a receptor for fibroblast growth factor. FGFR2 plays an important role in embryonic development and tissue repair, especially bone and blood vessels. It promotes the proliferation of keratinocytes and immature osteoblasts and promotes the apoptosis of differentiated osteoblasts. After ligand binding, FGFR-2  $\alpha$  IIIc activates several signaling cascades, including phosphorylation of PLCG1, FRS2, and PAK4. Activation of PLCG1 triggers the production of cell signaling molecules such as diacylglycerol and inositol 1,4, 5-triphosphate. FRS2 phosphorylation leads to recruitment of GRB2, GAB1, PIK3R1, and SOS1, mediating activation of RAS, MAPK1/ERK2, MAPK3/ERK1, MAP kinase signaling pathways, and AKT1 signaling pathways. FGFR2 up-regulates PAI-1 via JAK2/STAT3 signaling and induces M2 polarization in colorectal cancer macrophages  $^{[1][2][3]}$ .

Page 1 of 2 www.MedChemExpress.com  $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

Page 2 of 2 www.MedChemExpress.com