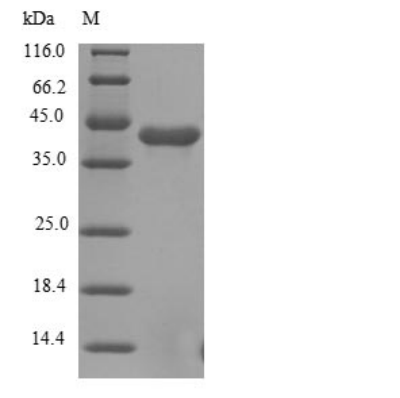
Recombinant Human Fibroblast growth factor receptor 1 (FGFR1), partial

Product Code	CSB-EP008642HUa0
Relevance	Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of embryonic development, cell proliferation, differentiation and migration. Required for normal mesoderm patterning and correct axial organization during embryonic development, normal skeletogenesis and normal development of the gonadotropin-releasing hormone (GnRH) neuronal system. Phosphorylates PLCG1, FRS2, GAB1 and SHB. Ligand binding leads to the activation of several signaling cascades. Activation of PLCG1 leads to the production of the cellular signaling molecules diacylglycerol and inositol 1,4,5-trisphosphate. Phosphorylation of FRS2 triggers recruitment of GRB2, GAB1, PIK3R1 and SOS1, and mediates activation of RAS, MAPK1/ERK2, MAPK3/ERK1 and the MAP kinase signaling pathway, as well as of the AKT1 signaling pathway. Promotes phosphorylation of SHC1, STAT1 and PTPN11/SHP2. In the nucleus, enhances RPS6KA1 and CREB1 activity and contributes to the regulation of transcription. FGFR1 signaling is down-regulated by IL17RD/SEF, and by FGFR1 ubiquitination, internalization and degradation.
Abbreviation	Recombinant Human FGFR1 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P11362
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	RPSPTLPEQAQPWGAPVEVESFLVHPGDLLQLRCRLRDDVQSINWLRDGVQL AESNRTRITGEEVEVQDSVPADSGLYACVTSSPSGSDTTYFSVNVSDALPSSE DDDDDDDSSSEEKETDNTKPNRMPVAPYWTSPEKMEKKLHAVPAAKTVKFK CPSSGTPNPTLRWLKNGKEFKPDHRIGGYKVRYATWSIIMDSVVPSDKGNYT CIVENEYGSINHTYQLDVVERSPHRPILQAGLPANKTVALGSNVEFMCKVYSD PQPHIQWLKHIEVNGSKIGPDNLPYVQILKTAGVNTTDKEMEVLHLRNVSFEDA GEYTCLAGNSIGLSHHSAWLTVLEALEERPAVMTSPLYLE
Research Area	Cancer
Source	E.coli
Target Names	FGFR1
Protein Names	Basic fibroblast growth factor receptor 1 Short name: BFGFR Short name: bFGF-R-1 Fms-like tyrosine kinase 2 Short name: FLT-2 N-sam Proto-oncogene c-Fgr CD_antigen: CD331 BFGFR, CEK, FGFBR, FLG, FLT2,

	HBGFR
Expression Region	22-376aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	43.4 kDa
Protein Length	Extracellular Domain

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The gene responsible for the Human FGFR1 protein (22-376aa) is incorporated into a plasmid vector, forming recombinant plasmid. The resulting recombinant plasmid is introduced into e.coli cells, from which cells survive in the presence of a specific antibiotic are selected. The selected e.coli cells containing the recombinant plasmid are cultured under conditions that facilitate the expression of the gene of interest. A N-terminal 6xHis tag is linked to the protein. After expression, affinity purification is used to isolate and purify the recombinant Human FGFR1 protein from the cell lysate. Denaturing SDS-PAGE is employed to resolve the resulting recombinant Human FGFR1 protein, revealing a purity greater than 85%.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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