



# Recombinant Human Fibroblast growth factor receptor 3 (FGFR3 IIIc), partial

<b>Product Code</b>	CSB-MP008646HU(A4)
<b>Relevance</b>	<p>Tyrosine-protein kinase that acts as cell-surface receptor for fibroblast growth factors and plays an essential role in the regulation of cell proliferation, differentiation and apoptosis. Plays an essential role in the regulation of chondrocyte differentiation, proliferation and apoptosis, and is required for normal skeleton development. Regulates both osteogenesis and postnatal bone mineralization by osteoblasts. Promotes apoptosis in chondrocytes, but can also promote cancer cell proliferation. Required for normal development of the inner ear. Phosphorylates PLCG1, CBL and FRS2. 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. Plays a role in the regulation of vitamin D metabolism. Mutations that lead to constitutive kinase activation or impair normal FGFR3 maturation, internalization and degradation lead to aberrant signaling. Over-expressed or constitutively activated FGFR3 promotes activation of PTPN11/SHP2, STAT1, STAT5A and STAT5B. Secreted isoform 3 retains its capacity to bind FGF1 and FGF2 and hence may interfere with FGF signaling.</p>
<b>Storage</b>	<p>The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.</p> <p>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.</p>
<b>Uniprot No.</b>	P22607-1
<b>Storage Buffer</b>	Lyophilized from Tris/PBS-based buffer, 6% Trehalose, pH 8.0
<b>Product Type</b>	Recombinant Proteins
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 85% as determined by SDS-PAGE.
<b>Sequence</b>	<p>RLRSPPKKGLGSPTVHKISRFLKRQVSLESNASMSNTPLVRIARLSSGEGPT  LANVSELELPADPKWELSRARLTGKPLGEGCFGQVMAEAIGIDKDRAAKPV  TVAVKMLKDDATDKDLSLVSEMEMMKMIGKHKNIINLLGACTQGGPLYVLE  YAAKGNLREFLRARRPPGLDYSFDTCKPPEEQLTFKDLVSCAYQVARGMEYL  ASQKCIHRDLAARNVLVTEDNVMKIADFGGLARDVHNLDDYKKTNGRLPVKW  MAPEALFDRVYTHQSDVWSFGVLLWEIFTLGGSPYPGIPVEELFKLLKEGHRM  DKPANCTHDLYMIMRECWHAAPSQRPTFKQLVEDLDRVLTVTSTDEYLDLSAP  FEQYSPGGQDTPSSSSSSGDDSVFAHDLPPAPPSSGGSR</p>
<b>Research Area</b>	Cancer
<b>Source</b>	Mammalian cell



<b>Target Names</b>	FGFR3
<b>Expression Region</b>	397-806aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	Partial
<b>Reconstitution</b>	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.
<b>Shelf Life</b>	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.