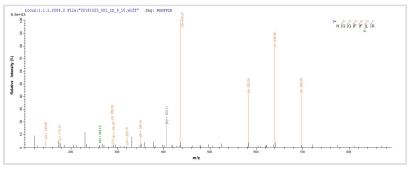
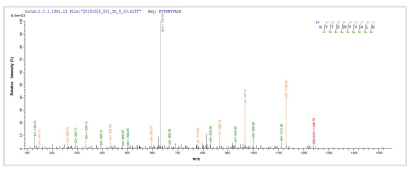
Recombinant Human Fibroblast growth factor 2 (FGF2)

Product Code	CSB-YP008625HU
Abbreviation	Recombinant Human FGF2 protein
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.	P09038
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	PALPEDGGSGAFPPGHFKDPKRLYCKNGGFFLRIHPDGRVDGVREKSDPHIKL QLQAEERGVVSIKGVCANRYLAMKEDGRLLASKCVTDECFFFERLESNNYNTY RSRKYTSWYVALKRTGQYKLGSKTGPGQKAILFLPMSAKS
Research Area	Signal Transduction
Source	Yeast
Target Names	FGF2
Protein Names	Recommended name: Fibroblast growth factor 2 Short name= FGF-2 Alternative name(s): Basic fibroblast growth factor Short name= bFGF Heparin-binding growth factor 2 Short name= HBGF-2
Expression Region	143-288aa
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	17.9 kDa
Protein Length	Full Length of Mature Protein
Image	



Based on the SEQUEST from database of Yeast host and target protein, the LC-MS/MS Analysis result of CSB-YP008625HU could indicate that this peptide derived from Yeast-expressed Homo sapiens (Human) FGF2.



Based on the SEQUEST from database of Yeast host and target protein, the LC-MS/MS Analysis result of CSB-YP008625HU could indicate that this peptide derived from Yeast-expressed Homo sapiens (Human) FGF2.

Description	The recombinant Human FGF2 is a yeast-expressed (143-288aa) protein with N-terminal 6xHis tag. The purity is 90%+ measured by SDS-PAGE. The highly developed genetic system, ease of use, reduced time input, and costs have made Pichia Pastoris an attractive organism for the expression and production of recombinant proteins. So we choose the Yeast system to express this recombinant FGF2 protein, which is able to carry specifically designed plasmids, and the plasmid used consists of restriction sites that can be used to insert the gene sequence of interest. Transformation of yeasts with the plasmid produces the desired protein and can be appropriately scaled up. FGF2, a potent mitogen for fibroblasts, exerts multiple functions in tissue development and repair via interactions with FGFR1-3. The involvement of FGF2 in cell proliferation, differentiation, migration, and apoptosis in airway structural cells contributes to epithelial repair, ASMCs hyperplasia, and vascular remodeling. Since FGF2 plays important role in angiogenesis, extracellular matrix regulation, cell differentiation, and inflammatory responses, it is thus related to the development, progression, and pathogenesis of tumors. Studies have shown that FGF2 mediates cell migration and invasion in breast cancer, pancreatic cancer, astrocytes, and gliomas.
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	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.