Human FGF-5

Human Fibroblast Growth Factor-5, recombinant

Synonyms: Fibroblast Growth Factor 5, FGF5, Heparin-Binding Growth Factor 5, HBGF-5, Smag-82, TCMGLY.

PLEASE NOTE: ALWAYS CENTRIFUGE VIAL BEFORE OPENING

Size	Order#	Lot#	Expiry Date
10 µg	1373.950.010		
50 µg	1373.950.050		
1 mg	1373.950.199		

Please enquire for bulk quantities and other vial sizes.

Description

Recombinant Human FGF-5 is a 252 amino acid protein, with a molecular mass of 27,7 kDa. Fibroblast Growth Factor-5 (FGF-5) is a secreted, heparin-binding growth factor belonging to the fibroblast growth factor (FGF) family. FGF family members possess extensive mitogenic and cell survival functions, and are involved in various biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF-5 binds to FGFR 1 c and 2 c, and plays a regulatory role in the hair growth cycle. In vitro, human FGF-5 is a mitogen for Balb/3 T3 fibroblasts and bovine heart endothelial cells. FGF5 is also a major muscle-derived survival factor for cultured spinal motoneurons. Developmentally, FGF5 mRNA is originally found in the embryoblast followed by the lateral somatic mesoderm, where it may play a part in angiogenesis, as well as the myotomes cranial to the tail region, where it may delay terminal myoblast differentiation during cell migration.

- **Biological Activity** ≥ 2 x 10^6 units/mg
- **Source** *E. coli*
- **Purity** ≥ 98 % (SDS-PAGE, HPLC)
- **Endotoxin Level** ≤ 0.1 ng/µg (≤ 1 EU/µg)
- **Stabilizer** None
- **Buffer** Sodium Phosphate (10mM), Sodium Chloride (50mM), pH 7.5*
- **Physical State** Sterile filtered, lyophilized

Biological Activity

The ED_{50} of ≤ 0.5 ng/ml was determined by the dose-dependent stimulation of thymidin uptake of BaF3 cells expressing FGF-receptors. It corresponds to a specific activity of ≥ 2.0 x 10^6 units/mg.

Reconstitution

We recommend a quick spin followed by reconstitution in water to a concentration of at least 100 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 week or in working aliquots at -20°C to -80°C. Working aliquots should be at the highest practical concentration. For long term storage we recommend to add at least 0.1 % HSA (order number: 2835.955.xyz or 2835.958.xyz) or BSA.

Stability

The lyophilized protein is stable at room temperature for up to 1 month and at least until the lot specific expiry date if kept below -18°C. Reconstituted FGF-6 should be stored in working aliquots at -20°C to -80°C if possible with carrier protein. Please avoid repeated freeze-thaw cycles.

Amino Acid Sequence

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MAWAHGEKRL APKGQPGPAA TDRNPRGSSS RQSSSSAMSS SSASSSPAAS LGSQGSGLEQ SSFQWSPSGR
RTGSLYCRVG IGFHLQIYPD GKVNGSHEAN MLSVLEIFAV SQGIVGIRGV FSNKFLAMSK KGKLHASAKF
TDDCKFRERF QENSYNTYAS AIHRTEKTGR EWYVALNKRG KAKRGCSPRV KPQHISTHFL PRFKQSEQPE
LSFTVTVPEK KKPPSPIKSK IPLSAPRKNT NSVKYRLKFR FG
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*The Buffer may vary depending on the Lot #. Please contact our technical support if you have specific requirements.

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Usage: For research use only. Not for use in diagnostic or therapeutic procedures. Not for human use.

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