

DATASHEET

Version 20181206

FGF-13, Human

Cat. No.: Z02936-1

Size: 1.0 mg

Synonyms: Fibroblast growth factor 13, FGF-13, Fibroblast growth factor homologous factor 2, FHF-2, FGF13, FHF2.

Description:

Fibroblast growth factor 13 (FGF13) is a new member of the fibroblast growth factor (FGF) family. They possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth, and invasion. FGF-13 was initially identified as FHF2 along with three other FHF factors, FHF1/FGF12, FHF3/FGF-11 and FHF4/FGF14 that comprise a unique intracellular FGF (iFGF) subfamily expressed throughout the developing and adult nervous system. Human FGF13 stimulated the phenotypic differentiation of cortical neurons. FGF13 interacts with voltage-gated sodium channel alpha subunit, and colocalizes at the nodes of Ranvier of dorsal root axons. The mechanism of action for FGF13 in neural development has not been described in detail.

Amino Acid Sequence:

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00001 MAAAIASSLI RQKRQARERE KSNACKCVSS PSKGKTS CDK
00041 NKLVNFSRVK LFGSKKRRRR RPEPQLKGIV TKLYSRQGYH
00081 LQLQADGTID GTKDEDSTYT LFNLI PVGLR VVAIQGVQTK
00121 LYLAMNSEGY LYTSELF TPE CKFKESVFEN YYVTYSSMIY
00161 RQQQSGRGWY LGLNKEGEIM KGNHVKNKP AAHFLPKPLK
00201 VAMYKEPSLH DLTEFSRSGS GTPTKSRVS GVLNGGKSMS
00241 HNEST
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Source: *E. coli*

Species: Human

Biological Activity: Test in process.

Molecular Weight: Approximately 27.6 kDa, a single non-glycosylated polypeptide chain containing 245 amino acids.

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM Tris, pH 8.5, 500 mM NaCl.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20°C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 95 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rHuFGF-13 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.