

32-6349: FGF12 Human

Application : Functional Assay

Alternative Name : FGF-12, FGF12, FGF12B, FHF1, Fibroblast growth factor 12, Fibroblast growth factor homologous factor 1, FHF-1, Myocyte-activating factor.

Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

FGF12 is part of the Fibroblast Growth Factor (FGF) family which has a vast mitogenic and cell survival functions, and play a role in a range of biological activities, among them are embryonic development, cell growth, morphogenesis, tissue repair, tumor growth, and invasion. FGF-12 doesn't obtain the N-terminal signal sequence present in the majority of the FGF family members, but it contains clusters of basic residues that act as a nuclear localization signal. When transfected into mammalian cells, FGF12 accumulated in the nucleus, but was not secreted. FGF12 is involved in nervous system development and function. FGF12 binds to IB2 (islet brain-2), a cellular kinase scaffold, and voltage gated sodium channels and is also involved in intracellular signalling and ion exchange.

Fibroblast Growth Factor 12 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 181 amino acids and having a molecular mass of 20.5kDa. The FGF12 is purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 98.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Lyophilized from a 0.2µm filtered concentrated solution in PBS, pH7.4 and 1mM DTT.

Content : It is recommended to reconstitute the lyophilized Fibroblast Growth Factor 12 in sterile 18M Omega -cm H₂O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage condition : Lyophilized FGF12 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Fibroblast Growth Factor 12 should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

Amino Acid : MESKEPQLKG IVTRLFSQQG YFLQMHPDGT IDGTDENS YTLFNLIPVG LRVVAIQGVK
ASLYVAMNGE GYLYSSDVFT PECKFKESVF ENYYVIYSST LYRQQESGRA WFLGLNKEGQ
IMKGNRVKKT KPSSHVFPK IEVCMYREQS LHEIGEKQGR SRKSSGTPTM NGGKVVNQDS T.

Application Note

Determined by FGF12 binding ability in a functional ELISA. Immobilized FGFR4/Fc Chimera at 5 Âµg/mL (100 ÂµL/well) can bind FGF12 with a linear range of 1.6100 ng/mL.