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Certificate of Analysis and Data Sheet

Recombinant Human Fibroblast Growth Factor 12

Catalog No. Source: 228-10466 Source: Escherichia Coli.

Synonyms

FGF-12, FGF12B, FHF1, Fibroblast growth factor 12, Fibroblast growth factor homologous factor 1, FHF-1, Myocyte-activating factor.

Introduction

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 signaling and ion exchange.

Description

The FGF-12 Human recombinant protein is a single, non-glycosylated polypeptide chain produced in E. coli, having a molecular weight of 22.6kDa and containing 201 amino acids (1-181). The FGF12 is fused to a 20 amino acid His tag at the N-terminus.

Formulation

The FGF-12 solution (1mg/ml) contains 20mM Tris pH-7.5, 1mM DTT, 2mM EDTA and 10% glycerol.

Stability

Store FGF12 at -20°C. Can be stored at 4°C for a limited period of time of 7 days.

Purity

Greater than 90% as determined by SDS-PAGE.

Amino acid sequence

MSSHHHHHH SSGLVPRGSH MESKEPQLKG IVTRLFSQQG YFLQMHPDGT IDGTKDENSD YTLFNLIPVG LRVVAIQGVK ASLYVAMNGE YLYSSDVFT PECKFKESVF ENYYVIYSST LYRQQESGRA WFLGLNKEGQ IMKGNRVKKT KPSSHFVPKP IEVCMYREQS LHEIGEKQGR RKSSGTPTM NGGKVVNQDS T.