

32-6350: FGF16 Human

Application : Functional Assay

Alternative Name : Fibroblast Growth Factor 16, Metacarpal 4-5 Fusion, FGF-16, MF4, FGF16.

Description

Source: Escherichia Coli.

Sterile Filtered colorless clear solution.

Fibroblast growth factor 16 (FGF16) is a member of the large FGF family, whose members are heparin-binding growth factors with a core 120 amino acid (a.a.) FGF domain which allows for a common tertiary structure. Human FGF16 cDNA is a 207 aa precursor protein with one N-linked glycosylation site. FGF16 though lacking a typical signal peptide, is efficiently produced by mechanisms other than the classical protein secretion pathway. FGF16 is expressed in cardiac cells and is required for proper heart development. FGF16 gene mutation was also observed in individuals with metacarpal 4-5 fusion. FGF16 has an imperative role in the regulation of embryonic development, cell proliferation and cell differentiation, and is required for normal cardiomyocyte proliferation and heart development.

FGF16 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 206 amino acids and having a molecular mass of 23.6kDa. The FGF-16 is purified by proprietary chromatographic techniques.

Product Info

Amount : 5 µg / 25 µg

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

Content : FGF-16 0.2µm filtered solution containing 20mM Tris-HCl, 1M NaCl, pH 9.0, 0.2% Tween-20 and 10% Glycerol.

Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please avoid freeze thaw cycles.

Amino Acid : AEVGGVFASL DWDLHGFSSS LGNVPLADSP GFLNERLGQI EGKLQRGSPT DFAHLKGILR
RRQLYCRTGF HLEIFPNGTV HGTRHDHSRF GILEFISLAV GLISIRGVDS GLYLGMNERG
ELYGSKKLTR ECVFREQFEE Nwyntyastl YKHSDSERQY YVALNKDGSP REGYRTKRHQ
KFTHFLPRPV DPSKLPSMSR DLFHYR.

Application Note

The ED50 as determined by thymidine uptake assay using FGF-receptors transfected BaF3 cells is less than 0.5ng/ml, corresponding to a specific activity of $> 2.0 \times 10^6$ IU/mg.