Recombinant Human FGF18 protein (His Tag)

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Catalog Number: PDEH101057



Description Species Human Mol Mass 19.4 kDa Accession O76093 Not validated for activity **Bio-activity Properties** > 95% as determined by reducing SDS-PAGE. Purity Endotoxin < 10 EU/mg of the protein as determined by the LAL method Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 Storage °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at $< -20^{\circ}$ C for 3 months. This product is provided as lyophilized powder which is shipped with ice packs. Shipping Formulation Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol. Reconstitution It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis. Data

KDa	М	R
135 100 75	Ξ	
65	-	
45		
35		
25		-
15	-	

> 95 % as determined by reducing SDS-PAGE.

Background

Fibroblast Growth Factor 18 (FGF-18) is a 20 kDa protein that plays an important role in skeletal development and bone homeostasis . Mature human FGF-18 shares 99% amino acid sequence identity with mouse and rat FGF-18 . It is expressed in embryonic somites and the neural fold, adult lung, cerebellar and hippocampal neurons, hair follicle root sheath cells, and osteogenic mesenchymal cells . FGF-18 binds to FGF R2c, FGF R3c as well as the Golgi protein GLG1 and induces the proliferation of astrocytes and microglia, vascular endothelial cells, dermal fibroblasts, papilla cells, and keratinocytes . FGF-18 is required for normal skeletal development . It recruits osteoclasts and osteoblasts to the growth plate, promotes osteoclast formation and function, inhibits osteoblast differentiation, promotes skeletal vascularization, and induces chondrocyte hypertrophy and cartilage matrix formation.

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