

## Recombinant Human FGF18 protein (His Tag)

**Catalog Number:** PDEH101057

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

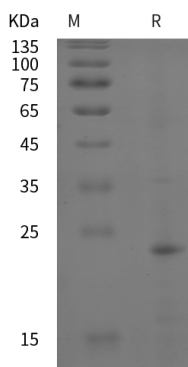
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human FGF18 protein Val31-Ala207, with an C-terminal His
<b>Calculated MW</b>	19.4 kDa
<b>Observed MW</b>	23 kDa
<b>Accession</b>	O76093
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg of the protein as determined by the LAL method
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	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



> 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.

### For Research Use Only

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