

## Recombinant Human FGF18 / Fibroblast Growth Factor 18,

### Animal Free & Carrier Free

Cat #: C-CYP322

Size: 5µg, 20µg, 100µg, 500µg, 1mg

Shipping: Blue Ice

### Product Overview

FGF18 is a member of the fibroblast growth factor (FGF) family. FGF family members possess broad mitogenic and cell survival activities, and are involved in a variety of biological processes, including embryonic development, cell growth, morphogenesis, tissue repair, tumor growth and invasion. FGF18 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.

### Product Information

**Source:** *Escherichia Coli*.

**Purity:** >98% as determined by SDS-PAGE. Ni-NTA chromatography.

**Biological Activity:** Measure by its ability to induce 3T3 cells proliferation. The ED50 for this effect is 1.3-2.0 ng/mL. The specific activity of recombinant human FGF18 is > 5 x 10<sup>5</sup> IU/mg.

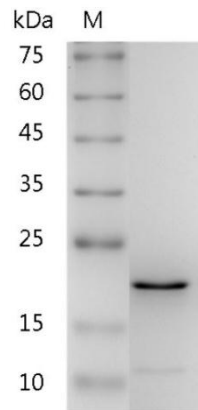
**Endotoxin:** <0.1EU per 1µg of the protein by the LAL method.

**Amino acid sequence:**

MAEENVDFRIHVENQTRARDDVSRKQLRLYQLYSRTSGKHIQVLGRRISARGEDGDKYAQLLVETDTFGSQVRIKGGKETEFYLCMNRKGGKLVGKPDGTSKECVFIEKVLENNYTALMSAKYSGWYVGFTEKGRPRKGPKTRENQQDVHFMKRYPKGQPELQKPFKYTTVTKRSR with

polyhistidine tag at the C-terminus.

**Formulation:** Lyophilized from a sterile filtered aqueous solution in 1xPBS, pH 8.0.



SDS-PAGE analysis of recombinant human FGF18

## Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.
2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H<sub>2</sub>O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.
3. The reconstituted solution can be stored at 2-8°C for up to 1 week.
4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 µg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

## Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

## Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.