

## Recombinant Human FGF21 Protein (Sumo Tag)

Catalog Number: GPEH1143

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

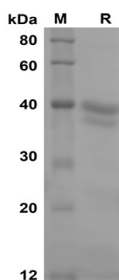
### Description

|               |                                                                          |
|---------------|--------------------------------------------------------------------------|
| Species       | Human                                                                    |
| Source        | E.coli-derived Human FGF21 protein His29-Ser209, with an N-terminal Sumo |
| Calculated MW | 35 kDa                                                                   |
| Observed MW   | 40 kDa                                                                   |
| Accession     | Q9NSA1                                                                   |
| Bio-activity  | Not validated for activity                                               |

### Properties

|                |                                                                                                                                                                                                                                        |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity         | > 80% as determined by reducing SDS-PAGE.                                                                                                                                                                                              |
| Endotoxin      | < 10 EU/mg of the protein as determined by the LAL method                                                                                                                                                                              |
| Storage        | 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. |
| Shipping       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                        |
| 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



SDS-PAGE analysis of Human FGF21 proteins, 2µg/lane of

Recombinant Human FGF21 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 40

KD

### Background

Fibroblast growth factor 21 (FGF21) 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. FGF-21 has a hydrophobic amino terminus, which is a typical signal sequence, and appears to be a secreted protein. The metabolic regulator fibroblast growth factor 21 (FGF21) has antidiabetic properties in animal models of diabetes and obesity. FGF21 is a novel adipokine associated with obesity-related metabolic complications in humans. The paradoxical increase of serum FGF21 in obese individuals, which may be explained by a compensatory response or resistance to FGF21, warrants further investigation. FGF-21, which we have identified as a novel metabolic factor, exhibits the therapeutic characteristics necessary for an effective treatment of diabetes.