

## Recombinant Cynomolgus FGF-21/Fibroblast Growth Factor 21 Protein (His Tag)

**Catalog Number:** PKSQ050041

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

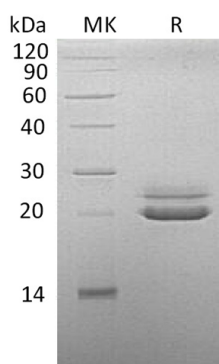
### Description

|                      |  |
|----------------------|--|
| <b>Species</b>       | Cynomolgus macaques  |
| <b>Source</b>        | HEK293 Cells-derived Cynomolgus macaques FGF-21 protein His29-Ser209, with an C-terminal His |
| <b>Calculated MW</b> | 20.2 kDa   |
| <b>Observed MW</b>   | 19-24 kDa  |
| <b>Accession</b>     | XM_005589811.2   |
| <b>Bio-activity</b>  | Not validated for activity   |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 95 % as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 1.0 EU per µg 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 of PBS, pH 7.4.<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual. |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.   |

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

Fibroblast Growth Factor 21 (FGF21) is a growth factor that belongs to the FGF family. FGF family proteins play a central role during prenatal development and postnatal growth and regeneration of many tissues, by promoting cellular proliferation and differentiation. FGF21 is a potent activator of glucose uptake on adipocytes, protects animal from diet-induced obesity when overexpression in transgenic mice, and lower blood glucose and triglyceride levels when therapeutically administered to diabetic rodents. FGF21 is produced by hepatocytes in response to free fatty acid stimulation of a PPARα/RXR dimeric complex. This situation occurs clinically during starvation, or following the ingestion of a highly-fat/low-carbohydrate diet. Upon FGF21 secretion, white adipose tissue is induced to release free fatty acids from triglyceride stores. Once free fatty acids reach hepatocytes, they are oxidized and reduced to acetyl-CoA. The acetyl-CoA is recombined into 4-carbon ketone bodies, released, and transported to peripheral tissue for TCA processing and energy generation.