Data Sheet (Cat.No.TMPK-00664)

TargetMol

GDF-15 Protein (Primary Amine Labeling), Cynomolgus, Recombinant (hFc), Biotinylated

General Information

Synonyms:	Placental TGF-beta;PTGFBPTGF-β;PLAB;MIC-1;GDF15;NAG-1;RG-1;PTGFBPTGF-beta;PDF;PTGF-beta;PTGFB;GDF-15;MIC1;Placental TGF-β;PTGF-β
Protein Construction:	Ala197-Val308
Species:	Cynomolgus
Expression Host:	HEK293 Cells
Accession:	G7PWZ3
Molecular Weight:	37.9 kDa (predicted). Due to glycosylation, the protein migrates to 40-50 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Cynomolgus GFRAL, His Tag at 1μg/ml (100μl/Well) on the plate. Dose response curve for Biotinylated Cynomolgus GDF15, hFc Tag with the EC50 of 4.8ng/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

Growth and differentiation factor 15 (GDF15) is an inflammation-associated hormone with poorly defined biology. Here, we investigated the role of GDF15 in bacterial and viral infections. Inflammation induced GDF15, and that GDF15 was necessary for surviving both bacterial and viral infections, as well as sepsis. The protective effects of

GDF15 were largely independent of pathogen control or the magnitude of inflammatory response, suggesting a role in disease tolerance.

Reference

Luan HH, et al. GDF15 Is an Inflammation-Induced Central Mediator of Tissue Tolerance. Cell. 2019 Aug 22;178(5): 1231-1244.e1doi: 10.1016/j.cell.2019.07.033. Epub 2019 Aug 8. PMID: 31402172; PMCID: PMC6863354.