

Background

Growth/differentiation factor 15 (GDF15) was first identified as Macrophage inhibitory cytokine-1 or MIC-1.^{[1][2]} It is a protein belonging to the transforming growth factor beta superfamily. Under normal conditions, GDF-15 is expressed in low concentrations in most organs and upregulated because of injury of organs such as such as liver, kidney, heart and lung.^{[3][4]} The function of GDF-15 is not fully cleared but it seems to have a role in regulating inflammatory pathways and to be involved in regulating apoptosis, cell repair and cell growth, which are biological processes observed in cardiovascular and neoplastic disorders.^{[3][5]} GDF-15 protects the heart from ischemia/reperfusion injury.^[6] GDF-15 has shown to be a strong prognostic protein in patients with different diseases such as heart diseases and cancer.^[7]

References

1. Bootcov MR, et al. (1997). Proc National Academy Sci USA. 94 (21): 11514–9.
2. Ago T, Sadoshima J (2006). Circulation Research. 98 (3): 294–7.
3. Zimmers TA, et al. (2005). Shock. 23 (6): 543–8.
4. Hsiao EC, et al. (2000). Molecular and Cellular Biology. 20 (10): 3742–51.
5. Wollert KC, et al. (2007). Circulation. 116 (14): 1540–8.
6. Kempf T, et al. (2006). Circulation Research. 98 (3): 351–60.
7. Wallentin L, et al. (2013). PLOS One. 8 (12): e78797.



Recombinant Monkey GDF-15 Protein

Catalog Number: GR175086

Description

Size: 5 µg

Source: Chinese Hamster Ovary cell derived

Composite: Ala29-Val308

Accession # G7PWZ3

N-terminal Sequence: His & Ala197

Predicted Molecular Mass: 31 kDa (monomer)

Specifications

SDS-PAGE: 31 kDa, reducing conditions

Activity : NA.

Endotoxin Level: <1.0 EU per 1 µg of the protein by the LAL method.

Purity: >97%, by SDSPAGE under reducing conditions and visualized by silver stain.

Formulation: Lyophilized from a 0.2 µm filtered solution in Acetonitrile and TFA.

Preparation and Storage

Reconstitution: Reconstitute at 50 µg/mL in sterile 4 mM HCl.

Shipping The product is shipped at ambient temperature or with wet ice. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze thaw cycles.

- 6 months, -20 to -70 °C as supplied.
- 3 months, -20 to -70°C under sterile conditions after reconstitution.

DECLARATION

THIS REAGENT IS FOR IN VITRO LABORATORY TESTING AND RESEARCH USE ONLY. DO NOT USE IT FOR CLINICAL DIAGNOSTICS. DO NOT USE OR INJECT IT IN HUMANS AND ANIMALS.

**FOR LABORATORY RESEARCH USE ONLY
NOT FOR USE IN HUMANS AND ANIMALS**