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# SCIENTIFIC

# GDF15 Human

**Description:**GDF15 Human Recombinant produced in E.Coli is a homodimeric, non-glycosylated, Polypeptide chain containing 2x113 amino acids and having a molecular mass of 24.5 kDa. The GDF15 is purified by proprietary chromatographic techniques.

**Synonyms:**GDF-15, MIC1, MIC-1, NAG-1, PDF, PLAB, PTGFB, Growth/differentiation factor 15, Placental bone morphogenetic protein, Placental TGF-beta, Macrophage inhibitory cytokine 1, Prostate differentiation factor, NSAID-activated gene 1 protein, NSAID-regulated ge

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Amino Acid Sequence: MARNGDHCPL GPGRCCRLHT VRASLEDLGW ADWVLSPREV QVTMCIGACP SQFRAANMHA QIKTSLHRLK PDTVPAPCCV PASYNPMVLI QKTDTGVSLQ TYDDLLAKDC HCI.

**Purity:**Greater than 95.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

### Formulation:

GDF15 is lyophilized without additives.

## Stability:

Lyophilized GDF15 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GDF15 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

### Usage:

NeoBiolabs products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

### Solubility:

It is recommended to reconstitute the lyophilized GDF15 in sterile 5mM AcOH (acetic Acid) at a concentration of 100

# Introduction:

GDF15 is part of the TGF-Beta superfamily that is involved in regulating inflammatory and apoptotic pathways in injured tissues and throughout disease processes. GDF15 is most abundant in the liver. Its expression in liver can be considerably up-regulated in during injury of organs such as liver, kidney, heart and lung. GDF-15 promotes proliferation or growth arrest and differentiation due to differences in cellular differentiation. GDF15 prevents apoptosis in cerebellar granule neurons by activating Akt and inhibiting endogenously active ERK. GDF15 is a novel autocrine/endocrine factor that antagonizes the hypertrophic response and loss of ventricular performance.

# **Biological Activity:**

The biological activity was assessed by the inhibition of DU-145 cells and was found to be 1-2g/ml.









Catalog #:CYPS-342

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