



Recombinant Human GDF-15
(Growth and Differentiation Factor-15)

Catalog Number: 100-171

Accession Number: Q99988

Specifications and Uses:

Alternate Names: MIC-1, Placental TGF β , Prostate differentiation factor

Description:

Growth and Differentiation Factor 15 (GDF-15) is a TGF β family member, made by the placenta and heart tissues, that has a role in regulating inflammatory and apoptotic pathways. GDF-15 has become an emerging marker of early heart disease and has the potential as being used as a molecule for screening patients for early heart failure. Recombinant human GDF-15 D is a non-glycosylated, disulfide linked homodimer, containing two identical 120 amino acid chains, with a total molecular weight of 26.8 kDa. There is a His to an Asp substitution at position 7.

Source: *E.coli*

Physical Appearance: Sterile filtered white lyophilized (freeze-dried) powder.

Formulation and Stability:

Recombinant human GDF-15 is lyophilized with no additives.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with **sterile 5 mM acetic acid (AcOH)** at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

Protein Content and Purity (typically $\geq 95\%$) determined by:

HPLC, Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

Endotoxin Level:

Measured by kinetic LAL analysis and is typically ≤ 1 EU/ μ g protein.

Biological Activity:

The activity is determined by the inhibition of DU-145 cells and is typically 1-2 μ g/mL.

AA Sequence:

MARNGDHCPL GPGRCRLHT VRASLEDLGW ADWVLSPREV QVTMCIGACP SQFRAANMHA QIKTSLHRLK
PDTVPAPCCV PASYNPMVLI QKTD TGVS LQ TYDDLLAKDC HCI

THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!

Gentaaur Molecular Products
Voortstraat 49
1910 Kampenhout, Belgium