

**Datasheet for 009-001-V09-0020****rHuman GDF-15 (D variant) Protein****Overview**

|                      |                                                                                               |
|----------------------|-----------------------------------------------------------------------------------------------|
| <b>Description:</b>  | Human Growth and Differentiation Factor-15 (D variant) Recombinant Protein - 009-001-V09-0020 |
| <b>Item No.:</b>     | 009-001-V09-0020                                                                              |
| <b>Size:</b>         | 20 µg                                                                                         |
| <b>Applications:</b> | SDS-PAGE                                                                                      |
| <b>Origin:</b>       | Human                                                                                         |
| <b>Expressed in:</b> | E. coli                                                                                       |

**Product Details**

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>        | Growth and Differentiation Factor 15 (GDF-15) is a TGFβ 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 113 amino acid chains, with a total molecular weight of 24.5 kDa. There is a His to an Asp substitution at position 7. |
| <b>Synonyms:</b>          | Macrophage inhibitory cytokine 1 (MIC-1), NSAID-activated gene 1 protein (NAG-1), NSAID-regulated gene 1 protein (NRG-1), Placental TGFβ, Placental bone morphogenetic protein, Prostate differentiation factor                                                                                                                                                                                                                                                                                                                                                               |
| <b>Species of Origin:</b> | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Expressed in:</b>      | E. coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Type:</b>              | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Low Endotoxin:</b>     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

**Target Details**

|                            |                                                                                                                                                                                                      |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | GDF15                                                                                                                                                                                                |
| <b>Purity/Specificity:</b> | Growth and Differentiation Factor-15 (D variant) purity was determined to be greater than 95% as determined by analysis by HPLC, UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-PAGE. |

Relevant Links: • [UniProtKB - Q99988](#)

## Application Details

|                             |                                                                                                                                                                                                                   |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | SDS-PAGE                                                                                                                                                                                                          |
| <b>Application Note:</b>    | Growth and Differentiation Factor-15 Recombinant Protein has been tested by SDS-PAGE and is suitable as a control for polyclonal or monoclonal anti-Growth and Differentiation Factor-15 in immunological assays. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                                                                                   |
| <b>Other:</b>               | Endotoxin Level: Measured by kinetic LAL analysis and is typically $\leq 1$ EU/ $\mu$ g protein. Biologic Activity: The activity is determined by the inhibition of DU-145 cells and is typically 1-2 $\mu$ g/mL. |

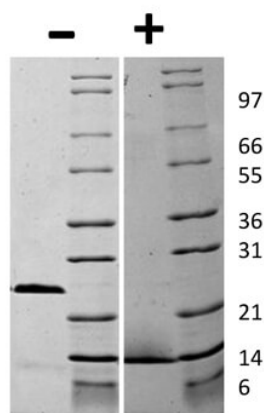
## Formulation

|                               |                                              |
|-------------------------------|----------------------------------------------|
| <b>Physical State:</b>        | Lyophilized                                  |
| <b>Concentration:</b>         | 0.1 mg/mL by UV absorbance at 280 nm         |
| <b>Buffer:</b>                | 0.1% Trifluoroacetic acid                    |
| <b>Preservative:</b>          | None                                         |
| <b>Stabilizer:</b>            | None                                         |
| <b>Reconstitution Volume:</b> | 20 $\mu$ l (20-200 $\mu$ l)                  |
| <b>Reconstitution Buffer:</b> | Restore with deionized water (or equivalent) |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Shipping Condition:</b> | Ambient                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Storage Condition:</b>  | Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature. |
| <b>Expiration:</b>         | Expiration date is six (6) months from date of receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## Images



#### SDS-PAGE

SDS-PAGE of Human Growth and Differentiation Factor-15 (D variant) Recombinant Protein. Lane 1: 1  $\mu$ g Human GDF-15 D Variant in non-reducing conditions (-). Lane 2: Molecular weight marker. Lane 3: 1  $\mu$ g Human GDF-15 D Variant in reducing conditions (+). Lane 4: Molecular weight marker. Human GDF-15 D Variant is predicted to be a homodimer with a predicted MW of 24.5 kDa.

## Disclaimer

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