

## Recombinant Human GDF2 Protein(His Tag)

Catalog Number: PDEH101121

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

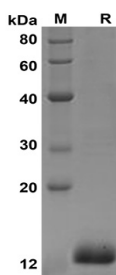
### Description

|                      |  |
|----------------------|--|
| <b>Species</b>       | Human  |
| <b>Source</b>        | E.coli-derived Human GDF2 BMP9 protein Ser320-Arg429, with an N-terminal His |
| <b>Calculated MW</b> | 11.9 kDa   |
| <b>Observed MW</b>   | 12 kDa   |
| <b>Accession</b>     | Q9UK05   |
| <b>Bio-activity</b>  | Not validated for activity   |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 95% as determined by reducing SDS-PAGE.  |
| <b>Endotoxin</b>      | < 10 EU/mg of the protein as determined by the LAL method  |
| <b>Storage</b>        | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.  |
| <b>Formulation</b>    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.  |
| <b>Reconstitution</b> | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.   |

### Data



SDS-PAGE analysis of Human GDF2 proteins, 2µg/lane of Recombinant Human GDF2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 12 kDa

### Background

BMPs belong to the TGF-β superfamily, which currently has over 20 members. BMPs play a vital role in several processes, such as embryogenesis and tissue homeostasis; thus, they are also known as body morphogenetic proteins.<sup>9</sup> BMP2, BMP6 and BMP7 are deeply involved in inflammatory disorders, including fibrosis, inflammatory bowel disease, ankylosing spondylitis, and rheumatoid arthritis. BMP9 is considered a unique member of the BMP family as it has the strongest osteogenic effect on mesenchymal stem cells (MSCs), is resistant to the BMP signaling inhibitors, noggin and BMP3, and significantly affects vascular homeostasis, angiogenesis, metabolism, neurogenesis, and pro- or anti-tumorigenesis.

### For Research Use Only