Cat. No. PME30039



## **PRODUCT INFORMATION**

GDF-5 **Target** 

Growth/differentiation factor 5;GDF-5;Bone morphogenetic protein 14;BMP-14;Cartilage-

**Synonyms** 

derived morphogenetic protein 1;CDMP-1;Lipopolysaccharide-associated protein 4;LAP-4;LPS-associated protein

4;Radotermin;CDMP1

Recombinant Human Growth/Differentiation Factor 5 is produced by our E.coli expression system and the target gene encoding Ala382-

Arg501 is expressed.

Delivery In Stock **Uniprot ID** P43026 **Expression Host** E.coli

Tag

Molecular Characterization

Description

Not available

**Molecular Weight** 

13.7 KDa

**Purity** 

Greater than 95% as determined by reducing SDS-PAGE.

Formulation & Reconstitution Lyophilized from a 0.2 µm filtered solution of 4mM

Storage & Shipping

Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient

temperature.

Growth Differentiation Factor 5(GDF-5, BMP-14) is a member of the BMP family of  $TGF\beta$  superfamily proteins. Human GDF-5, -6, and -7 are a defined subgroup of the BMP family. GDF-5 is synthesized as a homodimeric precursor protein consisting of a 354 amino acid (aa) Nterminal proregion and a 120 aa C-terminal mature peptide. Mature human GDF-5 shares 99% aa sequence identity with both mature mouse and rat GDF-5. GDF-5 signaling is mediated by formation of a heterodimeric complex consisting of a type 1 (BMPR-IB) and a type II (BMPR-IIor Activin RII) serine/threonine

**Background** 

kinase receptor which results in the

phosphorylation and activation of cytosolic Smad proteins (Smad1, 5, and 8). GDF-5 is involved in multiple developmental processes including limb generation, cartilage development, joint formation, bone morphogenesis, cell survival, and neuritogenesis. Inhibition of GDF-5 expression or

alteration of its signaling can facilitate the development of osteoarthritis.

**Usage** Research use only Conjugate Unconjugated



Email: info@dimabio.com Website: www.dimabio.com





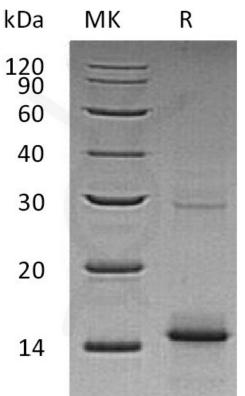


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.



Email: info@dimabio.com Website: www.dimabio.com