

Datasheet for ABIN7455649
GDF5 Protein[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	GDF5
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human Growth/Differentiation Factor 5 is produced by our E.coli expression system and the target gene encoding Ala382-Arg501 is expressed.
Characteristics:	Extracellular Domain Protein
Purity:	Greater than 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	GDF5
Alternative Name:	GDF-5 (GDF5 Products)
Background:	Growth/differentiation factor 5, GDF-5, Bone morphogenetic protein 14, BMP-14, Cartilage-derived morphogenetic protein 1, CDMP-1, Lipopolysaccharide-associated protein 4, LAP-4, LPS-associated protein 4, Radotermis, CDMP1 Growth Differentiation Factor 5 (GDF-5, BMP-14) is a member of the BMP family of TGFβ 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

Target Details

rat GDF-5. GDF-5 signaling is mediated by formation of a heterodimeric complex consisting of a type 1 (BMPRII) and a type II (BMPRI or Activin RII) serine/threonine 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.

Molecular Weight: 13.7 KDa

UniProt: [P43026](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Buffer: a 0.2 µm filtered solution of 4 mM HCl.

Storage: -20 °C

Storage Comment: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Expiry Date: 12 months