

PRODUCT INFORMATION

Target	GDF-5
Synonyms	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;Radotemin;CDMP1
Description	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	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 HCl.
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.
Background	Growth Differentiation Factor 5(GDF-5, BMP-14) is a member of the BMP family of TGF β 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-II 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.
Usage	Research use only
Conjugate	Unconjugated



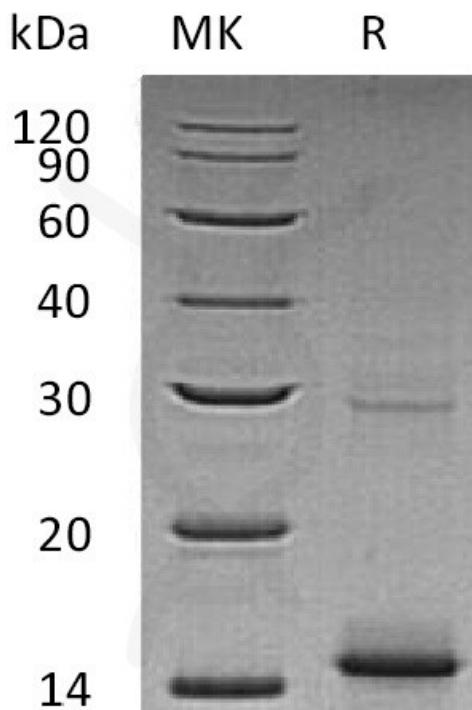


Figure 1. Greater than 95% as determined by reducing SDS-PAGE.

