32-8886: Recombinant Human GDF-5/BMP-14

Gene :   GDF5
Gene ID :   8200
Uniprot ID : P43026

Description

Source: E. coli.
MW :13.7kD.
Recombinant Human Growth/Differentiation Factor 5 is produced by our E.coli expression system and the target gene encoding Ala382-Arg501 is expressed. 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 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.

Product Info

Amount :	10 µg / 50 µg
Content :	Lyophilized from a 0.2 µm filtered solution of 4mM HCl.
Storage condition :	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.
Amino Acid :	MAPLATRQGKRPSKNLKARCSRKALHVNFKDMGWDDWIIAPLEYEAFHCEGLCEFPLRSHLEPTNHAVIQTLM NSMDPESTPPTCCVPTRLSPISILFIDSANNVVYKQYEDMVVESCGCR

Application Note

Endotoxin : Less than 0.1 ng/Ã□Âµg (1 IEU/Ã□Âµg) as determined by LAL test.

For Research Use Only. Not for use in diagnostic/therapeutics procedures.