

Product datasheet for **AR09215PU-N**

BMP14 / GDF5 (382-501, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	BMP14 / GDF5 (382-501, His-tag) human protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MAPLATRQ GK RPSKNLKARC SRKALHVNFK DMGWDDWIIA PLEYEAFHCE GLCEFP LRS H LEPTNHAVIQ TLMNSMDPES TPPTCCVPTR LSPISILFID SANNVVYKQY EDMVVE SCGC R
Tag:	His-tag
Predicted MW:	15.8 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 10 mM Sodium citrate pH 3.5, 10% glycerol
Endotoxin:	< 1.0 EU per 1 µg of protein (determined by LAL method)
Preparation:	Liquid purified protein
Protein Description:	GDF-5, fused to His-tag at N-terminus, was expressed as insoluble protein aggregate in E.coli and purified by conventional chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_000548</u>
Locus ID:	8200
UniProt ID:	<u>P43026</u>
Cytogenetics:	20q11.22
Synonyms:	Bone Morphogenetic Protein 14, GDF-5, CDMP1, Radotermin



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Summary:

This gene encodes a secreted ligand of the TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein regulates the development of numerous tissue and cell types, including cartilage, joints, brown fat, teeth, and the growth of neuronal axons and dendrites. Mutations in this gene are associated with acromesomelic dysplasia, brachydactyly, chondrodysplasia, multiple synostoses syndrome, proximal symphalangism, and susceptibility to osteoarthritis. [provided by RefSeq, Aug 2016]

Protein Families:

Adult stem cells, Cancer stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS, Secreted Protein, Stem cell relevant signaling - TGFb/BMP signaling pathway

Protein Pathways:

Cytokine-cytokine receptor interaction, TGF-beta signaling pathway

Product images: