Recombinant human BMP-14/GDF-5 protein

Catalog Number: ATGP0334

PRODUCT INFORMATION

Expression system
E.coli

Domain
382-501aa

UniProt No.
P43026

NCBI Accession No.
NP_000548

Alternative Names
Growth differentiation factor 5, Bone morphogenetic protein 14 (BMP-14), Cartilage-derived morphogenetic protein 1 (CDMP-1), Lipopolysaccharide-associated protein 4 (LAP-4; LPS-associated protein 4), Radotermin, BMP14, CDMP1, LAP4, OS5, SYNS2

PRODUCT SPECIFICATION

Molecular Weight
15.8 kDa (141aa) confirmed by MALDI-TOF

Concentration
0.5mg/ml (determined by Bradford assay)

Formulation
Liquid in. 10mM Sodium Citrate buffer (pH 3.5) containing 10% glycerol

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Tag
His-Tag

Application
SDS-PAGE

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description
Growth differentiation factor 5 (GDF-5) is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This protein plays a role in chondrogenesis and chondrocyte metabolism, tendon and

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ligament tissue formation, and bone repair. It also increases the survival of neurones that respond to a neurotransmitter called dopamine, and is a potential therapeutic molecule associated with Parkinson's disease. 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.

Amino acid Sequence

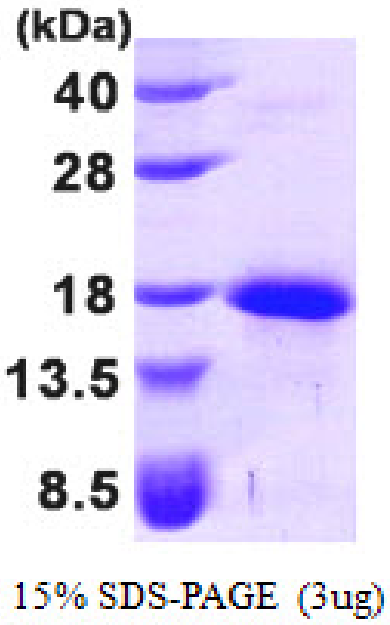
MGSSHHHHHH SSGLVPRGSH MAPLATRQGK RPSKNLKARC SRKALHVNFK DMGWDDWIIA PLEYEAFHCE GLCEFPLRSH LEPTNHAVIQ TLMNSMDPES TPPTCCVPTR LSPISILFID SANNVVYKQY EDMVVESCGC R

General References

Feng G., et al. (2008). Growth Factor. 26(3):132-42
Sullivan AM., et al. (2005). J Anat. 207(3):219-26.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.