

Recombinant Mouse Growth,differentiation factor 5(Gdf5)

Catalog No: #AP70328

Package Size: #AP70328-1 20ug #AP70328-2 100ug #AP70328-3 1mg

Description

Product Name	Recombinant Mouse Growth,differentiation factor 5(Gdf5)
Host Species	E.coli
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:376-495aaSequence Info:Full Length
Other Names	Bone morphogenetic protein 14 ;BMP-14
Accession No.	P43027
Calculated MW	17.6 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	APLANRQGKRPSKNLKARCSRKALHVNFKDMGWDDWIIAPLEYEAFHCEGLCEFPLRSHLEPTNHAVIQTLMN SMDPESTPPTCCVPTRLSPISILFIDSANNVYKQYEDMVVESCGR
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Growth factor involved in bone and cartilage formation. During cartilage development regulates differentiation of chondrogenic tissue through two pathways. Firstly, positively regulates differentiation of chondrogenic tissue through its binding of high affinity with BMPR1B and of less affinity with BMPR1A, leading to induction of SMAD1-SMAD5-SMAD8 complex phosphorylation and then SMAD protein signaling transduction . Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG . Required to prevent excessive muscle loss upon denervation. This function requires SMAD4 and is mediated by phosphorylated SMAD1,5,8 . Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes .

References

BMP signaling controls muscle mass.Sartori R., Schirwis E., Blaauw B., Bortolanza S., Zhao J., Enzo E., Stantzou A., Mouisel E., Toniolo L., Ferry A., Stricker S., Goldberg A.L., Dupont S., Piccolo S., Amthor H., Sandri M.Nat. Genet. 45:1309-1318(2013) Research Topic:Others

Note: This product is for in vitro research use only and is not intended for use in humans or animals.