

GDF5 / GDF-5 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS15579**Specification**

GDF5 / GDF-5 Antibody - Product Information

Application	IHC
Primary Accession	P43026
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	55kDa KDa

GDF5 / GDF-5 Antibody - Additional Information**Gene ID** 8200**Other Names**

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, Radotermin, GDF5, BMP14, CDMP1

Reconstitution & Storage

Long term: -70°C; Short term: -20°C

Precautions

GDF5 / GDF-5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

GDF5 / GDF-5 Antibody - Protein Information**Name** GDF5**Synonyms** BMP14, CDMP1**Function**

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 (PubMed:15530414, PubMed:21976273, PubMed:24098149, PubMed:25092592). Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG (PubMed:21976273). Required to prevent excessive muscle loss upon denervation. This function requires SMAD4 and is mediated by

phosphorylated SMAD1/5/8 (By similarity). Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes (PubMed:11276205).

Cellular Location

Secreted. Cell membrane

Tissue Location

Predominantly expressed in long bones during embryonic development. Expressed in monocytes (at protein level)

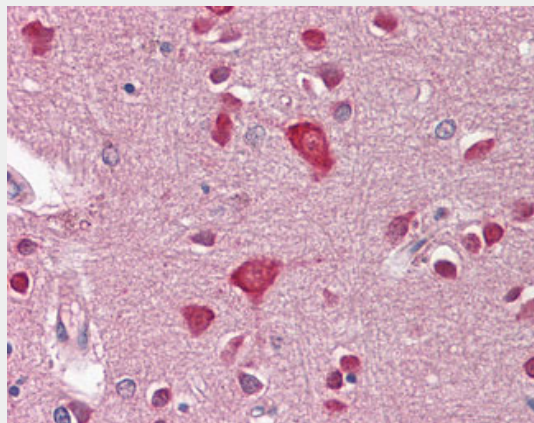
Volume

100 µl

GDF5 / GDF-5 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GDF5 / GDF-5 Antibody - Images

Anti-GDF5 / GDF-5 antibody IHC staining of human brain, cortex.

GDF5 / GDF-5 Antibody - Background

Required to prevent excessive muscle loss upon denervation. This function requires SMAD4 and is mediated by phosphorylated SMAD1/5/8 (By similarity). Could be involved in bone and cartilage formation. Chondrogenic signaling is mediated by the high-affinity receptor BMPRII. Binds bacterial lipopolysaccharide (LPS) et mediates LPS-induced inflammatory response, including TNF secretion by monocytes.

GDF5 / GDF-5 Antibody - References

Hoetten G.,et al.Biochem. Biophys. Res. Commun. 204:646-652(1994).
Chang S.,et al.J. Biol. Chem. 269:28227-28234(1994).
Deloukas P.,et al.Nature 414:865-871(2001).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Triantafilou K.,et al.Nat. Immunol. 2:338-345(2001).