

# Goat anti-GDF5 Antibody

Peptide-affinity purified goat antibody

Catalog # AF4342a

## Product Information

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<b>Application</b>	Pep-ELISA
<b>Primary Accession</b>	<a href="#">P43026</a>
<b>Other Accession</b>	<a href="#">NP_000548.1</a>
<b>Reactivity</b>	Human, Mouse, Horse
<b>Host</b>	Goat
<b>Clonality</b>	Polyclonal
<b>Clone Names</b>	GDF5
<b>Calculated MW</b>	55395

## Additional Information

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<b>Gene ID</b>	8200
<b>Other Names</b>	GDF5; growth differentiation factor 5; CDMP1; LAP4; SYNS2; cartilage-derived morphogenetic protein-1
<b>Dilution</b>	Pep-ELISA~~N/A
<b>Format</b>	Supplied at 0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin. Aliquot and store at -20°C. Minimize freezing and thawing.
<b>Storage</b>	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
<b>Precautions</b>	Goat anti-GDF5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	GDF5
<b>Synonyms</b>	BMP14, CDMP1
<b>Function</b>	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: <a href="#">15530414</a> , PubMed: <a href="#">21976273</a> , PubMed: <a href="#">24098149</a> ,

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)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.