

Datasheet for ABIN5510677

GDF5 ELISA Kit[Go to Product page](#)**1** Image

Overview

| | |
|----------------------|----------------|
| Quantity: | 96 tests |
| Target: | GDF5 |
| Binding Specificity: | AA 376-495 |
| Reactivity: | Mouse |
| Method Type: | Sandwich ELISA |
| Application: | ELISA |

Product Details

| | |
|-----------------------------|--|
| Purpose: | Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse GDF5 |
| Brand: | PicoKine™ |
| Analytical Method: | Quantitative |
| Detection Method: | Colorimetric |
| Specificity: | Expression system for standard: E.coli Immunogen sequence: A376-R495 |
| Cross-Reactivity (Details): | There is no detectable cross-reactivity with other relevant proteins. |

Target Details

| | |
|-------------------|--|
| Target: | GDF5 |
| Alternative Name: | Gdf5 (GDF5 Products) |
| Background: | Protein Function: Growth factor involved in bone and cartilage formation. During cartilage |

Target Details

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 (By similarity). Secondly, negatively regulates chondrogenic differentiation through its interaction with NOG (By similarity). Required to prevent excessive muscle loss upon denervation. This function requires SMAD4 and is mediated by phosphorylated SMAD1/5/8 (PubMed:24076600). Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes (By similarity). .

Background: Growth/differentiation factor 5 is a protein that in humans is encoded by the GDF5 gene. GDF5 is a protein belonging to the transforming growth factor beta superfamily that is expressed in the developing central nervous system, and has a role in skeletal and joint development. It also increases the survival of neurones that respond to the neurotransmitter dopamine, and is a potential therapeutic molecule associated with Parkinson's disease.

Synonyms: Growth/differentiation factor 5,GDF-5,Bone morphogenetic protein 14,BMP-14,Gdf5,Bmp14, Bp, Gdf-5,

Full Gene Name: Growth/differentiation factor 5

Cellular Localisation: Secreted . Cell membrane.

UniProt: [P43027](#)

Application Details

Plate: Pre-coated

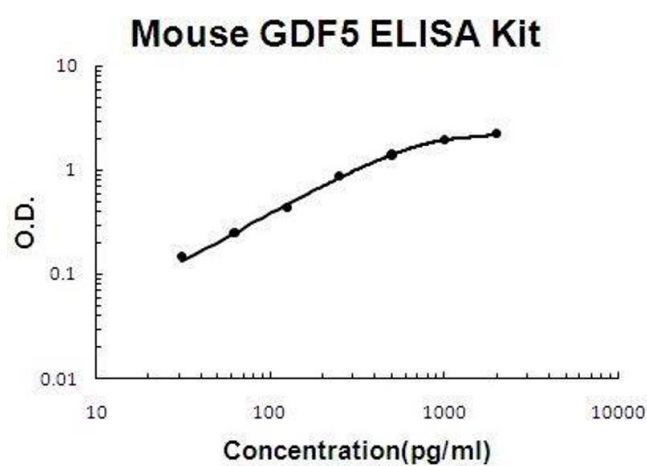
Restrictions: For Research Use only

Handling

Storage: 4 °C,-20 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles(Shipped with wet ice.)

Expiry Date: 12 months



ELISA

Image 1. Mouse GDF5 PicoKine ELISA Kit standard curve