

ARG82352 Mouse GDF5 ELISA Kit

Package: 96 wells
Store at: 4°C

Component

| Cat. No. | Component Name | Package | Temp |
|--------------|---------------------------------------|----------------------|---|
| ARG82352-001 | Antibody-coated microplate | 8 X 12 strips | 4°C. Unused strips should be sealed tightly in the air-tight pouch. |
| ARG82352-002 | Standard | 2 X 10 ng/vial | 4°C |
| ARG82352-003 | Standard/Sample diluent | 30 ml (Ready to use) | 4°C |
| ARG82352-004 | Antibody conjugate concentrate (100X) | 1 vial (100 µl) | 4°C |
| ARG82352-005 | Antibody diluent buffer | 12 ml (Ready to use) | 4°C |
| ARG82352-006 | HRP-Streptavidin concentrate (100X) | 1 vial (100 µl) | 4°C |
| ARG82352-007 | HRP-Streptavidin diluent buffer | 12 ml (Ready to use) | 4°C |
| ARG82352-008 | 25X Wash buffer | 20 ml | 4°C |
| ARG82352-009 | TMB substrate | 10 ml (Ready to use) | 4°C (Protect from light) |
| ARG82352-010 | STOP solution | 10 ml (Ready to use) | 4°C |
| ARG82352-011 | Plate sealer | 4 strips | Room temperature |

Summary

| | |
|---------------------|---|
| Product Description | ARG82352 Mouse GDF5 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse GDF5 in serum, plasma (EDTA, heparin) and cell culture supernatants. |
| Tested Reactivity | Ms |
| Tested Application | ELISA |
| Target Name | GDF5 |
| Conjugation | HRP |
| Conjugation Note | Substrate: TMB and read at 450 nm. |
| Sensitivity | 15.6 pg/ml |
| Sample Type | Serum, plasma (EDTA, heparin) and cell culture supernatants. |
| Standard Range | 31.2 - 2000 pg/ml |
| Sample Volume | 100 µl |
| Precision | Intra-Assay CV: 7.0% Inter-Assay CV: 7.3% |

Alternate Names LAP-4; CDMP-1; Cartilage-derived morphogenetic protein 1; SYM1B; GDF-5; Radotermis; BDA1C; OS5; LAP4; Bone morphogenetic protein 14; BMP-14; BMP14; Lipopolysaccharide-associated protein 4; LPS-associated protein 4; SYNS2; Growth/differentiation factor 5; CDMP1

Application Instructions

Assay Time ~ 5 hours

Properties

Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol GDF5

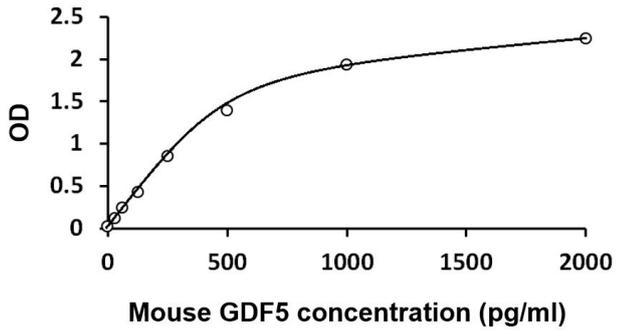
Gene Full Name growth differentiation factor 5

Background The protein encoded by this gene is a member of the bone morphogenetic protein (BMP) family and the TGF-beta superfamily. This group of proteins is characterized by a polybasic proteolytic processing site which is cleaved to produce a mature protein containing seven conserved cysteine residues. The members of this family are regulators of cell growth and differentiation in both embryonic and adult tissues. Mutations in this gene are associated with acromesomelic dysplasia, Hunter-Thompson type; brachydactyly, type C; and chondrodysplasia, Grebe type. These associations confirm that the gene product plays a role in skeletal development. [provided by RefSeq, Jul 2008]

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 BMPRI1B and of less affinity with BMPRI1A, 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 (By similarity). Binds bacterial lipopolysaccharide (LPS) and mediates LPS-induced inflammatory response, including TNF secretion by monocytes. [UniProt]

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Cellular Localization Secreted. Cell membrane. [UniProt]



ARG82352 Mouse GDF5 ELISA Kit standard curve image

ARG82352 Mouse GDF5 ELISA Kit results of a typical standard run with optical density reading at 450 nm.