

Goat Anti-LRP4 / LRP10 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1634a**Specification**

Goat Anti-LRP4 / LRP10 Antibody - Product Information

Application	WB, IHC
Primary Accession	O75096
Other Accession	NP_002325 , 4038 , 228357 (mouse) , 83469 (rat)
Reactivity	Human
Predicted	Mouse, Rat, Cow
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	212045

Goat Anti-LRP4 / LRP10 Antibody - Additional Information**Gene ID** 4038**Other Names**

Low-density lipoprotein receptor-related protein 4, LRP-4, Multiple epidermal growth factor-like domains 7, LRP4, KIAA0816, LRP10, MEGF7

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

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.

Precautions

Goat Anti-LRP4 / LRP10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-LRP4 / LRP10 Antibody - Protein Information**Name** LRP4**Synonyms** KIAA0816, LRP10, MEGF7**Function**

Mediates SOST-dependent inhibition of bone formation. Functions as a specific facilitator of SOST-mediated inhibition of Wnt signaling. Plays a key role in the formation and the maintenance of the neuromuscular junction (NMJ), the synapse between motor neuron and skeletal muscle.

Directly binds AGRIN and recruits it to the MUSK signaling complex. Mediates the AGRIN-induced phosphorylation of MUSK, the kinase of the complex. The activation of MUSK in myotubes induces the formation of NMJ by regulating different processes including the transcription of specific genes and the clustering of AChR in the postsynaptic membrane. Alternatively, may be involved in the negative regulation of the canonical Wnt signaling pathway, being able to antagonize the LRP6-mediated activation of this pathway. More generally, has been proposed to function as a cell surface endocytic receptor binding and internalizing extracellular ligands for degradation by lysosomes. May play an essential role in the process of digit differentiation (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:Q8VI56}; Single-pass type I membrane protein

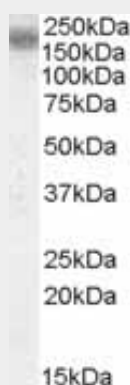
Tissue Location

Expressed in bone; present in osteoblasts and osteocytes. No expression is observed in osteoclast. Expressed in several regions of the brain.

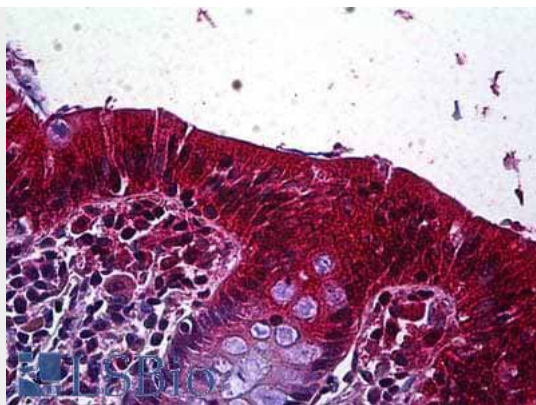
Goat Anti-LRP4 / LRP10 Antibody - Protocols

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](#)

Goat Anti-LRP4 / LRP10 Antibody - Images

AF1634a (0.1 µg/ml) staining of Human Cerebrum lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1634a (3.75 µg/ml) staining of paraffin embedded Human Colon. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-LRP4 / LRP10 Antibody - Background

This gene encodes a member of the low-density lipoprotein receptor-related protein family. The encoded protein may be a regulator of Wnt signaling. Mutations in this gene are associated with Cenani-Lenz syndrome.

Goat Anti-LRP4 / LRP10 Antibody - References

Analysis of recently identified osteoporosis susceptibility genes in Han Chinese women. Liu JM, et al. J Clin Endocrinol Metab, 2010 Sep. PMID 20554715.
LRP4 mutations alter Wnt/beta-catenin signaling and cause limb and kidney malformations in Cenani-Lenz syndrome. Li Y, et al. Am J Hum Genet, 2010 May 14. PMID 20381006.
Molecular characterization and expression of the low-density lipoprotein receptor-related protein-10, a new member of the LDLR gene family. Jeong YH, et al. Biochem Biophys Res Commun, 2010 Jan 1. PMID 20005200.
New sequence variants associated with bone mineral density. Styrkarsdottir U, et al. Nat Genet, 2009 Jan. PMID 19079262.
Human chromosome 11 DNA sequence and analysis including novel gene identification. Taylor TD, et al. Nature, 2006 Mar 23. PMID 16554811.