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Goat Anti-CAV3 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1199a

Specification

Goat Anti-CAV3 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P56539
Other Accession	NP_203123, 859, 12391 (mouse), 29161 (rat)
Reactivity	**Human, Mouse, Rat, Pig**
Predicted	**Dog, Cow**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**17259**

Goat Anti-CAV3 Antibody - Additional Information

Gene ID 859

Other Names
Caveolin-3, M-caveolin, CAV3

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-CAV3 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-CAV3 Antibody - Protein Information

Name CAV3

Function
May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity. May also regulate voltage-gated potassium channels. Plays a role in the sarcolemma repair mechanism of both skeletal muscle and cardiomyocytes that permits rapid resealing of membranes disrupted by mechanical stress (By similarity). Mediates the recruitment of CAVIN2 and CAVIN3 proteins to the caveolae (PubMed:19262564).

Cellular Location
Golgi apparatus membrane; Peripheral membrane protein. Cell membrane {ECO:0000250|UniProtKB:P51638}; Peripheral membrane protein. Membrane, caveola {ECO:0000250|UniProtKB:P51637}; Peripheral membrane protein. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:P51637}. Note=Potential hairpin-like structure in the membrane. Membrane protein of caveolae (By similarity)

Tissue Location
Expressed predominantly in muscle.

Goat Anti-CAV3 Antibody - Protocols

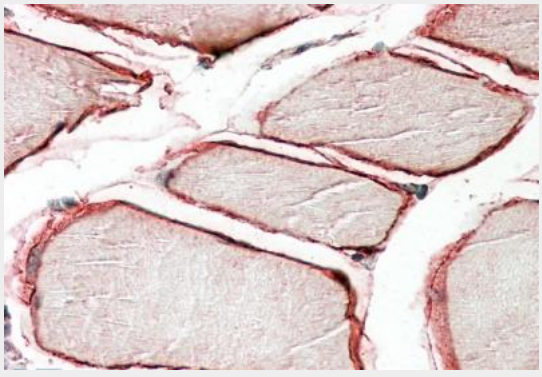
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-CAV3 Antibody - Images



AF1199a (0.3 µg/ml) staining of Human Heart lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.



AF1199a (3.8 µg/ml) staining of paraffin embedded Human Skeletal Muscle. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Goat Anti-CAV3 Antibody - Background

This gene encodes a caveolin family member, which functions as a component of the caveolae plasma membranes found in most cell types. Caveolin proteins are proposed to be scaffolding proteins for organizing and concentrating certain caveolin-interacting molecules. Mutations identified in this gene lead to interference with protein oligomerization or intra-cellular routing, disrupting caveolae formation and resulting in Limb-Girdle muscular dystrophy type-1C (LGMD-1C), hyperCKemia or rippling muscle disease (RMD). Alternative splicing has been identified for this locus, with inclusion or exclusion of a differentially spliced intron. In addition, transcripts utilize multiple polyA sites and contain two potential translation initiation sites.

Goat Anti-CAV3 Antibody - References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.
Genetic risk factors for hepatopulmonary syndrome in patients with advanced liver disease. Roberts KE, et al. Gastroenterology, 2010 Jul. PMID 20346360.
Bedside diagnosis of rippling muscle disease in CAV3 p.A46T mutation carriers. Sundblom J, et al. Muscle Nerve, 2010 Jun. PMID 20229577.
Human variation in alcohol response is influenced by variation in neuronal signaling genes. Joslyn G, et al. Alcohol Clin Exp Res, 2010 May. PMID 20201926.
Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.