

CAV3 Antibody (N-term) Blocking Peptide

Synthetic peptide Catalog # BP6516a

Specification

CAV3 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

P56539

CAV3 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 859

Other Names

Caveolin-3, M-caveolin, CAV3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6516a was selected from the N-term region of human CAV3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CAV3 Antibody (N-term) Blocking Peptide - 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 LocationExpressed predominantly in muscle.

CAV3 Antibody (N-term) Blocking Peptide - Protocols

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

Blocking Peptides

CAV3 Antibody (N-term) Blocking Peptide - Images

CAV3 Antibody (N-term) Blocking Peptide - Background

CAV3 is 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 its 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).

CAV3 Antibody (N-term) Blocking Peptide - References

Garg, V., Biochem. Biophys. Res. Commun. 385 (3), 472-477 (2009)Cai, C., . Biol. Chem. 284 (23), 15894-15902 (2009)