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CD49e Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP2876b

Specification

CD49e Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P08648

CD49e Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 3678

Other Names
Integrin alpha-5, CD49 antigen-like family member E, Fibronectin receptor subunit alpha, Integrin alpha-F, VLA-5, CD49e, Integrin alpha-5 heavy chain, Integrin alpha-5 light chain, ITGA5, FNRA

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2876b was selected from the C-term region of human CD49e. 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.

CD49e Antibody (C-term) Blocking Peptide - Protein Information

Name ITGA5 (HGNC:6141)

Synonyms FNRA

Function
Integrin alpha-5/beta-1 (ITGA5:ITGB1) is a receptor for fibronectin and fibrinogen. It recognizes the sequence R-G-D in its ligands. ITGA5:ITGB1 binds to PLA2G2A via a site (site 2) which is distinct from the classical ligand-binding site (site 1) and this induces integrin conformational changes and enhanced ligand binding to site 1 (PubMed:18635536, PubMed:25398877). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed:12807887, PubMed:17158881). ITGA5:ITGB1

acts as a receptor for fibronectin (FN1) and mediates R-G-D-dependent cell adhesion to FN1 (PubMed:33962943). ITGA5:ITGB1 is a receptor for IL1B and binding is essential for IL1B signaling (PubMed:29030430). ITGA5:ITGB3 is a receptor for soluble CD40LG and is required for CD40/CD40LG signaling (PubMed:31331973).

Cellular Location
Cell membrane; Single-pass type I membrane protein. Cell junction, focal adhesion

Tissue Location
Expressed in placenta (at protein level).

CD49e Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

CD49e Antibody (C-term) Blocking Peptide - Images

CD49e Antibody (C-term) Blocking Peptide - Background

CD49e belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This protein is the integrin alpha 5 chain. Alpha chain 5 undergoes post-translational cleavage in the extracellular domain to yield disulfide-linked light and heavy chains that join with beta 1 to form a fibronectin receptor. In addition to adhesion, integrins are known to participate in cell-surface mediated signalling.

CD49e Antibody (C-term) Blocking Peptide - References

Boehmler,A.M., J. Immunol. 182 (11), 6789-6798 (2009)Okazaki,T., Am. J. Pathol. 174 (6), 2378-2387 (2009)Schornberg,K.L., Proc. Natl. Acad. Sci. U.S.A. 106 (19), 8003-8008 (2009)