

CD49e Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP2876c**Specification**

CD49e Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P08648](#)**CD49e Antibody (Center) 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 [AP2876c](/products/AP2876c) was selected from the Center 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 (Center) 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](http://www.uniprot.org/citations/18635536), PubMed: [25398877](http://www.uniprot.org/citations/25398877)). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed: [12807887](http://www.uniprot.org/citations/12807887), PubMed: [17158881](http://www.uniprot.org/citations/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 (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CD49e Antibody (Center) Blocking Peptide - Images**CD49e Antibody (Center) 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 (Center) 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)