

CD49f Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9255b**Specification**

CD49f Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P23229](#)**CD49f Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 3655**Other Names**

Integrin alpha-6, CD49 antigen-like family member F, VLA-6, CD49f, Integrin alpha-6 heavy chain, Integrin alpha-6 light chain, Processed integrin alpha-6, Alpha6p, ITGA6

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP9255b](/products/AP9255b) was selected from the C-term region of human CD49f. 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.

CD49f Antibody (C-term) Blocking Peptide - Protein Information**Name** ITGA6**Function**

Integrin alpha-6/beta-1 (ITGA6:ITGB1) is a receptor for laminin on platelets (By similarity). Integrin alpha-6/beta-1 (ITGA6:ITGB1) is present in oocytes and is involved in sperm-egg fusion (By similarity). Integrin alpha-6/beta-4 (ITGA6:ITGB4) is a receptor for laminin in epithelial cells and it plays a critical structural role in the hemidesmosome (By similarity). ITGA6:ITGB4 binds to NRG1 (via EGF domain) and this binding is essential for NRG1-ERBB signaling (PubMed: [20682778](http://www.uniprot.org/citations/20682778)). ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed: [22351760](http://www.uniprot.org/citations/22351760)). ITGA6:ITGB4 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed: [28873464](http://www.uniprot.org/citations/28873464)).

Cellular Location

Cell membrane; Single-pass type I membrane protein. Cell membrane; Lipid-anchor

Tissue Location

Integrin alpha-6/beta-4 is predominantly expressed by epithelia. Isoforms containing segment X1 are ubiquitously expressed. Isoforms containing segment X1X2 are expressed in heart, kidney, placenta, colon, duodenum, myoblasts and myotubes, and in a limited number of cell lines; they are always coexpressed with the ubiquitous isoform containing segment X1. In some tissues (e.g Salivary gland), isoforms containing cytoplasmic segment A and isoforms containing segment B are detected while in others, only isoforms containing one cytoplasmic segment are found (segment A in epidermis and segment B in kidney). Processed integrin alpha-6: Expressed at low levels in normal prostate tissue with elevated levels in prostate cancer tissue (at protein level) (PubMed:15023541)

CD49f Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CD49f Antibody (C-term) Blocking Peptide - Images**CD49f Antibody (C-term) Blocking Peptide - Background**

The CD49f protein product is the integrin alpha chain alpha 6. Integrins are integral cell-surface proteins composed of an alpha chain and a beta chain. A given chain may combine with multiple partners resulting in different integrins. For example, alpha 6 may combine with beta 4 in the integrin referred to as TSP180, or with beta 1 in the integrin VLA-6. Integrins are known to participate in cell adhesion as well as cell-surface mediated signalling.

CD49f Antibody (C-term) Blocking Peptide - References

Kim,T.H., et.al, Mol. Cancer Res. 7 (10), 1605-1612 (2009)Eeles,R.A., et.al, Nat. Genet. 41 (10), 1116-1121 (2009)