10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-ITGA6 iso2(S1064) Antibody Blocking peptide

Synthetic peptide
Catalog # BP3687a

Specification

Phospho-ITGA6 iso2(S1064) Antibody Blocking peptide - Product Information

Primary Accession P23229

Phospho-ITGA6 iso2(S1064) Antibody 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 AP3687a was selected from the region of human Phospho-ITGA6 iso2-pS1064. 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.

Phospho-ITGA6 iso2(S1064) Antibody 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). ITGA6:ITGB4 binds to IGF1 and this binding is essential for IGF1 signaling (PubMed:22351760). ITGA6:ITGB4 binds to IGF2 and this binding is essential for IGF2 signaling (PubMed: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)

Phospho-ITGA6 iso2(S1064) Antibody Blocking peptide - Protocols

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

- Blocking Peptides

Phospho-ITGA6 iso2(S1064) Antibody Blocking peptide - Images

Phospho-ITGA6 iso2(S1064) Antibody Blocking peptide - Background

The ITGA6 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. Two transcript variants encoding different isoforms have been found for this gene.

Phospho-ITGA6 iso2(S1064) Antibody Blocking peptide - References

Kim,T.H., et.al., Mol. Cancer Res. 7 (10), 1605-1612 (2009)Eeles,R.A.,Nat. Genet. 41 (10), 1116-1121 (2009)Boroujerdnia,M.G., et.al., Pak. J. Biol. Sci. 12 (4), 360-366 (2009)