

ITGA5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5519b

Specification

ITGA5 Antibody (C-term) - Product Information

Application FC, WB, E **Primary Accession** P08648 Other Accession NP 002196 Human, Mouse Reactivity Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG **Antigen Region** 796-822

ITGA5 Antibody (C-term) - 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

This ITGA5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 796-822 amino acids of human ITGA5.

Dilution

FC~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ITGA5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

ITGA5 Antibody (C-term) - 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

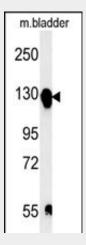
Expressed in placenta (at protein level).

ITGA5 Antibody (C-term) - Protocols

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

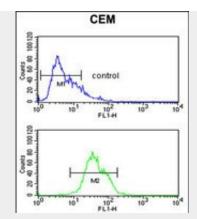
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ITGA5 Antibody (C-term) - Images



ITGA5 Antibody (C-term) (Cat. #AP5519b) western blot analysis in mouse bladder tissue lysates (15ug/lane). This demonstrates the ITGA5 antibody detected ITGA5 protein (arrow).





ITGA5 Antibody (C-term) (Cat. #AP5519b) flow cytometric analysis of CEM cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

ITGA5 Antibody (C-term) - Background

The product of this gene belongs to the integrin alpha chain family. Integrins are heterodimeric integral membrane proteins composed of an alpha chain and a beta chain. This gene encodes 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. [provided by RefSeq].

ITGA5 Antibody (C-term) - References

Kim, S., et al. Carcinogenesis 31(4):597-606(2010) Ryu, M.H., et al. Biochem. Biophys. Res. Commun. 393(1):11-15(2010) Yang, Y., et al. J. Biol. Chem. 285(1):131-141(2010) Lowin, T., et al. Arthritis Rheum. 60(12):3623-3632(2009)

ITGA5 Antibody (C-term) - Citations

• Calycosin-7-O-β-D-glucoside promotes oxidative stress-induced cytoskeleton reorganization through integrin-linked kinase signaling pathway in vascular endothelial cells.