

#### CD49e Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2876b

#### Specification

# CD49e Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region FC, WB,E <u>P08648</u> Human, Mouse Rabbit Polyclonal Rabbit IgG 114536 796-824

### CD49e 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 CD49e antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 796-824 amino acids from the C-terminal region of human CD49e.

**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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

CD49e Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# CD49e Antibody (C-term) - Protein Information

Name ITGA5 (<u>HGNC:6141</u>)



# 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:<u>18635536</u>, PubMed:<u>25398877</u>). ITGA5:ITGB1 acts as a receptor for fibrillin-1 (FBN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed:<u>12807887</u>, PubMed:<u>17158881</u>). ITGA5:ITGB1 acts as a receptor for fibronectin (FN1) and mediates R-G-D-dependent cell adhesion to FBN1 (PubMed:<u>33962943</u>). ITGA5:ITGB1 is a receptor for IL1B and binding is essential for IL1B signaling (PubMed:<u>29030430</u>). ITGA5:ITGB3 is a receptor for soluble CD40LG and is required for CD40/CD40LG signaling (PubMed:<u>31331973</u>).

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

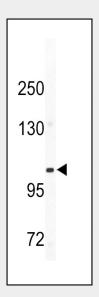
**Tissue Location** Expressed in placenta (at protein level).

# CD49e Antibody (C-term) - Protocols

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

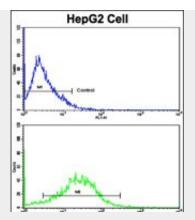
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

#### CD49e Antibody (C-term) - Images



Western blot analysis of CD49e antibody (C-term) (Cat.# AP2876b) in mouse bladder tissue lysates (35ug/lane). CD49e (arrow) was detected using the purified Pab.





Flow cytometric analysis of HepG2 cells using CD49e Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# CD49e Antibody (C-term) - 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) - 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)