

# CD49e LC Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51289

# **Product Information**

Application	WB
Primary Accession	<u>P08648</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	114536

#### **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	KLH conjugated synthetic peptide derived from human CD49e LC
Dilution	WB~~ 1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

#### **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 FN1 (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).

### Background

Integrin alpha-5/beta-1 is a receptor for fibronectin and fibrinogen. It recognizes the sequence R-G-D in its ligands. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.

## References

Argraves W.S., et al.J. Cell Biol. 105:1183-1190(1987). Birkenmeier T.M., et al.J. Biol. Chem. 266:20544-20549(1991). Fitzgerald L.A., et al.Biochemistry 26:8158-8165(1987). Argraves W.S., et al.J. Biol. Chem. 261:12922-12924(1986). Takada Y., et al.Proc. Natl. Acad. Sci. U.S.A. 84:3239-3243(1987).

#### Images



Anti-CD49e LC Antibodyat 1:1000 dilution + A549 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 115 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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