

Integrin alpha 4 Rabbit pAb

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Catalog # AP52126

Product Information

Application	WB
Primary Accession	P13612
Reactivity	Human
Predicted	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	114900
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Integrin alpha 4
Epitope Specificity	551-650/1032
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Membrane; Single pass type I membrane protein.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Integrin alpha 4 beta 7, also known as, the lymphocyte Peyer's patch adhesion molecule (LPAM1) is a member of the integrin family of cell surface receptors. It is expressed primarily on mucosal lymphocytes, but is also present on NK cells and eosinophils. The alpha 4 beta 7 heterodimer mediates the binding of lymphocytes to its ligand, mucosal vascular addressin (MAdCAM1) on the high endothelial venules, thereby directing the homing of lymphocytes into Peyer's patches and intestinal lamina propria.

Additional Information

Gene ID	3676
Other Names	Integrin alpha-4, CD49 antigen-like family member D, Integrin alpha-IV, VLA-4 subunit alpha, CD49d, ITGA4, CD49D
Dilution	WB=1:500-2000,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ITGA4
Synonyms	CD49D
Function	Integrins alpha-4/beta-1 (VLA-4) and alpha-4/beta-7 are receptors for fibronectin. They recognize one or more domains within the alternatively spliced CS-1 and CS-5 regions of fibronectin. They are also receptors for VCAM1. Integrin alpha-4/beta-1 recognizes the sequence Q-I-D-S in VCAM1. Integrin alpha-4/beta-7 is also a receptor for MADCAM1. It recognizes the sequence L-D-T in MADCAM1. On activated endothelial cells integrin VLA-4 triggers homotypic aggregation for most VLA-4-positive leukocyte cell lines. It may also participate in cytolytic T-cell interactions with target cells. ITGA4:ITGB1 binds to fractalkine (CX3CL1) and may act as its coreceptor in CX3CR1-dependent fractalkine signaling (PubMed:23125415). ITGA4: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). Integrin ITGA4:ITGB1 represses PRKCA-mediated L-type voltage-gated channel Ca(2+) influx and ROCK-mediated calcium sensitivity in vascular smooth muscle cells via its interaction with SVEP1, thereby inhibiting vasocontraction (PubMed:35802072).
Cellular Location	Membrane; Single-pass type I membrane protein
Tissue Location	Expressed in vascular smooth muscle cells (at protein level).

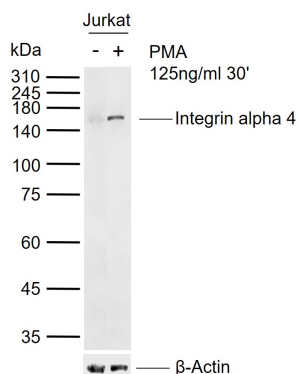
Background

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References

Takada Y.,et al.EMBO J. 8:1361-1368(1989).
 Rubio M.,et al.Eur. J. Immunol. 22:1099-1102(1992).
 Szabo M.C.,et al.Mol. Immunol. 32:1453-1454(1995).
 Hillier L.W.,et al.Nature 434:724-731(2005).
 Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.

Images



Sample:

Lane 1: Normal human Jurkat cell lysates

Lane 2: Jurkat treated with PMA 125ng/ml 30min

Primary: Anti-Integrin alpha 4 (AP52126) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 111 kDa

Observed band size: 150 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.