



Rat Anti-Mouse VLA-4 (CD49d) Monoclonal antibody, clone PS/2 (CABT-L4339)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	The PS/2 monoclonal antibody reacts with human and mouse VLA-4 α chain also known as CD49d and integrin alpha 4
Target	Mouse/Human VLA-4 (CD49d)
Immunogen	Mouse P815 mast cells
Isotype	IgG2b, κ
Source/Host	Rat
Species Reactivity	Human, Mouse
Clone	PS/2
Purification	Protein G purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo VLA-4 neutralization, in vitro VLA-4 neutralization, FC
Molecular Weight	150 kDa
Format	0.2 μ M filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 6.5. Contains no stabilizers or preservatives. [low endotoxin azide-free]

Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay
Related dilution buffer: CABT-LB02

Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction The PS/2 monoclonal antibody reacts with human and mouse VLA-4 α chain also known as CD49d and integrin alpha 4. VLA-4 is a 150 kDa glycoprotein belonging to the integrin family that is expressed by many cell types including T and B lymphocytes, monocytes, eosinophils, basophils, mast cells, thymocytes, NK cells, and dendritic cells. Integrin $\alpha 4$ associates with integrin $\beta 7$ to form integrin $\alpha 4\beta 7$ also known as LPAM-1 as well as integrin $\beta 1$ (CD29) to form integrin $\alpha 4\beta 1$ also known as VLA-4. Integrin $\alpha 4$ plays roles in adhesion and T cell co-stimulation. Integrin $\alpha 4$ ligands include VCAM-1, MAdCAM-1, and fibronectin. The PS/2 antibody is useful for in vivo and in vitro VLA-4 neutralization.

Keywords ITGA4;integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor);IA4;CD49D;integrin alpha-4;269C wild type;integrin alpha 4;integrin alpha-IV;VLA-4 subunit alpha;integrin alpha-4 subunit

GENE INFORMATION

Official Symbol	integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)
Synonyms	ITGA4; integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor); IA4; CD49D; integrin alpha-4; 269C wild type; integrin alpha 4; integrin alpha-IV; VLA-4 subunit alpha; integrin alpha-4 subunit
References	Badell, I. R., et al. (2015). "Pathogen Stimulation History Impacts Donor-Specific CD8 T Cell Susceptibility to Costimulation/Integrin Blockade-Based Therapy." Am J Transplant. PubMed;Thomas, S. Y., et al. (2011). "PLZF induces an intravascular surveillance program mediated by long-lived LFA-1-ICAM-1 interactions." J Exp Med 208(6): 1179-1188. PubMed;