

## Anti-Integrin alpha 4 [HP1/2] Standard Size Ab03253-1.1

Isotype and Format: Mouse IgG1, Kappa

Clone Number: HP1/2

**Alternative Name(s) of Target:** CD49d; VLA-4;  $\alpha$ 4; VLA4; ITGA4;  $\alpha$ 4 $\beta$ 1;  $\alpha$ 4 integrin; VLA4 heterodimer ( $\alpha$ 4 $\beta$ 1); Integrin alpha-4; Integrin alpha-IV; VLA-4 subunit alpha; CD49 antigen-like family member D; B1 integrin very late activation antigen-4

UniProt Accession Number of Target Protein: P13612

Published Application(s): inhibit, IP, Block, FC

Published Species Reactivity: Guinea Pig, Human

Immunogen:

**Specificity:** This antibody specifically binds epitope B of the alpha 4 chain of human integrin alpha 4 (CD49d). Integrins alpha-4/beta-1 (VLA-4) acts as a receptor for fibronectin and VCAM1. VLA-4 is atypical because it is mostly restricted to lymphoid and myeloid cells, and indirect evidence had suggested that it might be involved in various cell-cell interactions. In addition, VLA-4 has been shown to mediate T and B lymphocyte attachment to the heparin II binding fragment of human plasma fibronectin (FN). This antibody is also reported to cross react with integrin alpha-4/beta-7 ( $\alpha$ 4 $\beta$ 7).

**Application Notes:** This antibody can be used for the immunoprecipitation of VLA-4 from cell lysates (PMID: 2430809). This antibody is also capable of detecting integrin alpha 4 expressed on the surface of Ramos cells by flow cytometry (PMID: 2430809; 1689216). This antibody can also block adherence of CTT leukocytes to recombinant soluble VCAM 1-coated plates in vitro (PMID: 7686922). This antibody can also block the interaction of VLA-4 with fibronectin. This antibody does not cause cell aggregation (PMID: 1709929). This antibody can bind soluble integrin alpha-4 in an ELISA. This antibody also inhibited the binding of PAF-stimulated eosinophils to MAdCAM-1 transfectants. This antibody also inhibited binding of unstimulated eosinophils to soluble recombinant human (rh)VCAM-1 and fibronectin (Fn) (PMID: 8911148). **Antibody First Published in:** Sánchez-Madrid et al. VLA-3: a novel polypeptide association within the VLA molecular complex: cell distribution and biochemical characterization. Eur J Immunol. 1986 Nov;16(11):1343-9. PMID:2430809

**Note on publication:** Describes the generation of eight antibodies against VLA-4 antigen.

## **Product Form**

Size: 200 µg Purified antibody. Purification:

Protein A affinity purified

**Supplied In:** PBS with 0.02% Proclin 300.

**Storage Recommendation:** Store at 4°C for up to 3 months. For longer storage, aliquot and store at - 20°C.

**Concentration:** 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.