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# Integrin alpha 1 Rabbit pAb

Catalog # AP96461

## Product Information

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| **Application** | WB |
| **Primary Accession** | P56199 |
| **Other Accession** | P56199 |
| **Reactivity** | Human |
| **Predicted** | Rat, Mouse, Horse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 130848 |
| **Physical State** | Liquid |
| **Immunogen** | KLH conjugated synthetic peptide derived from human Integrin alpha 1 |
| **Epitope Specificity** | 1001-1179/1179 |
| **Isotype** | IgG |
| **Purity** | affinity purified by Protein A |
| **Buffer** | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| **SIMILARITY** | Belongs to the integrin alpha chain family.Contains 7 FG-GAP repeats. Contains 1 VWFA domain. |
| **SUBUNIT** | Heterodimer of an alpha and a beta subunit. Alpha-1 associates with beta-1. Interacts with RAB21. |
| **Important Note** | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |
| **Background Descriptions** | Integrins are important extracellular matrix (ECM) receptor proteins located on cell surfaces. They are hetrodimers composed of an alpha and a beta transmembrane glycoprotein subunit. Around twenty two different integrins (different alpha/ beta subunit combinations) are found in nature. Integrins are generally present in high concentrations at the cell surface, but, unlike most other cell surface receptors, they bind ligands with very low affinity. Due to their weak individual binding, integrins need to cluster and bind in groups in order to effectively bind the ECM. Integrins bind many different ligands including laminin. Each integrin is made up of a large N terminal extracellular domain that binds the ECM ligand and a small C terminal cytoplasmic domain that mediates interaction with the actin cytoskeleton and signaling function. Alpha 1 integrin along with alpha 2, alpha L and alpha M has a unique inserted domain. Integrin alpha 1 is a receptor for laminin and collagen. The alpha1 subunit is also known as CD49a. CD49a associates with CD29 (beta 1 integrin), to form an alpha1 beta1 heterodimer, identified as the rat homologue to VLA1, which is involved in cellular adhesion to laminin and collagen. |

## Additional Information

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| **Gene ID** | 3672 |
| **Other Names** | CD49a; VLA1; E130012M19Rik; ITA1_HUMAN; ITGA1; CD49 antigen-like family |

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| | member A; Laminin and collagen receptor; VLA-1; ITA1_MOUSE; ITA1_RAT; integrin subunit alpha 1; integrin, alpha 1; very late antigen-1 |
| **Dilution** | WB=1:500-2000 |
| **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

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| **Name** | ITGA1 |
| **Function** | Integrin alpha-1/beta-1 is a receptor for laminin and collagen. It recognizes the proline-hydroxylated sequence G-F-P-G-E-R in collagen. Involved in anchorage-dependent, negative regulation of EGF-stimulated cell growth. |
| **Cellular Location** | Membrane; Single-pass type I membrane protein. |

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