

## Rabbit anti-Mouse, Rat Integrin Alpha 4/Itga4 Polyclonal Antibody | anti-ITGA4 antibody

Anti-Integrin Alpha 4/Itga4 Antibody Picoband

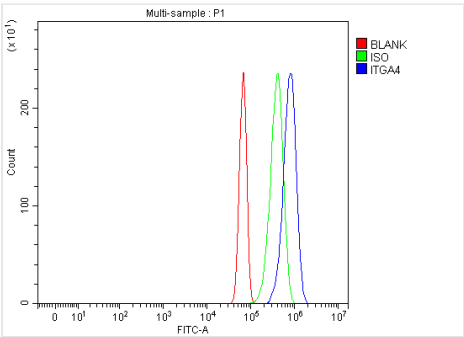
| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                          |
|-----------|--------|------------|-------------------------------------------------------|
| AAA126990 | Rabbit | Mouse, Rat | ELISA, Flow Cytometry, Functional Assay, Western Blot |

### PRODUCT SYNONYMS

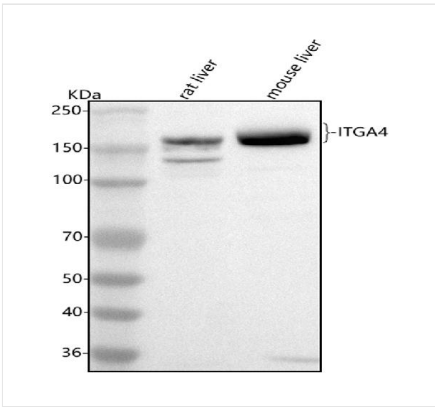
Integrin Alpha 4/Itga4; Polyclonal Antibody; Anti-Integrin Alpha 4/Itga4 Antibody Picoband; Serine/threonine-protein kinase AtPK1/AtPK6; 70 kDa ribosomal protein S6 kinase 1 antibody; KS6B1\_HUMAN antibody; p70 alpha antibody; P70 beta 1 antibody; p70 ribosomal S6 kinase alpha antibody; p70 ribosomal S6 kinase beta 1 antibody; p70 S6 kinase alpha antibody; P70 S6 Kinase antibody; p70 S6 kinase alpha 1 antibody; p70 S6 kinase alpha 2 antibody; p70 S6K antibody; p70 S6K-alpha antibody; p70 S6KA antibody; p70(S6K) alpha antibody; p70(S6K)-alpha antibody; p70-alpha antibody; p70-S6K 1 antibody; p70-S6K antibody; P70S6K antibody; P70S6K1 antibody; p70S6Kb antibody; PS6K antibody; Ribosomal protein S6 kinase 70kDa polypeptide 1 antibody; Ribosomal protein S6 kinase beta 1 antibody; Ribosomal protein S6 kinase beta-1 antibody; Ribosomal protein S6 kinase I antibody; RPS6KB1 antibody; S6K antibody; S6K-beta-1 antibody; S6K1 antibody; Serine/threonine kinase 14 alpha antibody; Serine/threonine-protein kinase 14A antibody; STK14A antibody; anti-ITGA4 antibody

### PRODUCT SPECIFICATIONS

|                                                 |                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Rabbit                                                                                                                                                                                                                                                                                                                                                         |
| Reactivity                                      | Mouse, Rat                                                                                                                                                                                                                                                                                                                                                     |
| Clonality                                       | Polyclonal                                                                                                                                                                                                                                                                                                                                                     |
| Isotype                                         | IgG                                                                                                                                                                                                                                                                                                                                                            |
| Specificity                                     | Expressed in all tissues.                                                                                                                                                                                                                                                                                                                                      |
| Purity/Purification                             | Immunogen affinity purified.                                                                                                                                                                                                                                                                                                                                   |
| Form/Format                                     | Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.                                                                                                                                                                                                                                                                                   |
| Applicable Applications for anti-ITGA4 antibody | ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)                                                                                                                                                                                                                                                                                                            |
| Immunogen                                       | E coli-derived mouse Integrin Alpha 4/Itga4 recombinant protein (Position: Y41-D963). Mouse Itga4 shares 85.2% amino acid (aa) sequence identity with human Itga4.                                                                                                                                                                                             |
| Subcellular Localization                        | Cytoplasm, Nucleus                                                                                                                                                                                                                                                                                                                                             |
| Reconstitution                                  | Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                                                                                                                                                                       |
| Cross Reactivity                                | No cross reactivity with other proteins.                                                                                                                                                                                                                                                                                                                       |
| Protein Function                                | Downstream effector of TOR signaling pathway involved in osmotic stress response. Could be involved in the control of plant growth and development. Phosphorylates the ribosomal proteins P14, P16 and S6. Functions as a repressor of cell proliferation and required for maintenance of chromosome stability and ploidy levels through the RBR1-E2F pathway. |
| Preparation and Storage                         | At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.                                                                                                                                          |



**FCM/FACS (Flow Cytometry)**  
Figure 2. Flow Cytometry analysis of NIH/3T3 cells using anti-Integrin Alpha 4/Itga4 antibody (AAA126990). Overlay histogram showing NIH/3T3 cells stained with AAA126990 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Integrin Alpha 4/Itga4 Antibody (AAA126990, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



**WB (Western Blot)**  
Figure 1. Western blot analysis of Integrin Alpha 4/Itga4 using anti-Integrin Alpha 4/Itga4 antibody (AAA126990). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: mouse liver tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Integrin Alpha 4/Itga4 antigen affinity purified polyclonal antibody (#AAA126990) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Integrin Alpha 4/Itga4 at approximately 150-180 kDa. The expected band size for Integrin Alpha 4/Itga4 is at 116 kDa.

ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-ITGA4 antibody | The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.                                                                                                                                                                                                                                                                                                                                                                                 |
| Product Categories/Family for anti-ITGA4 antibody   | Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| References                                          | 1. Cunningham, S. A., Rodriguez, J. M., Arrate, M. P., Tran, T. M., Brock, T. A. JAM2 interacts with alpha-4/beta-1: facilitation by JAM3. J. Biol. Chem. 277: 27589-27592, 2002. 2. Fernandez-Ruiz, E., Pardo-Manuel de Villena, F., Rubio, M. A., Corbi, A. L., Rodriguez de Cordoba, S., Sanchez-Madrid, F. Mapping of the human VLA-alpha-4 gene to chromosome 2q31-q32. Europ. J. Immun. 22: 587-590, 1992. 3. Garmy-Susini, B., Jin, H., Zhu, Y., Sung, R.-J., Hwang, R., Varner, J. Integrin alpha-4-beta-1--VCAM-1--mediated adhesion between endothelial and mural cells is required for blood vessel maturation. J. Clin. Invest. 115: 1542-1551, 2005. |

NCBI AND UNIPROT INFORMATION

|                                  |                  |
|----------------------------------|------------------|
| NCBI GI #                        | 114326554        |
| NCBI GeneID                      | 16401            |
| NCBI Accession #                 | NP_034706.3      |
| NCBI GenBank Nucleotide #        | NM_010576.3      |
| UniProt Accession #              | Q00651           |
| Molecular Weight                 | 115,696 Da       |
| NCBI Official Full Name          | integrin alpha-4 |
| NCBI Official Synonym Full Names | integrin alpha 4 |
| NCBI Official Symbol             | Itga4            |

|                                      |                                                                                                                                                                                                                             |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>NCBI Official Synonym Symbols</b> | CD49D; Itga4B                                                                                                                                                                                                               |
| <b>NCBI Protein Information</b>      | integrin alpha-4; CD49 antigen-like family member D; LPAM subunit alpha; VLA-4 receptor, alpha 4 subunit; VLA-4 subunit alpha; integrin alpha-IV; integrin alpha4B; lymphocyte Peyer patch adhesion molecules subunit alpha |
| <b>UniProt Protein Name</b>          | Integrin alpha-4                                                                                                                                                                                                            |
| <b>UniProt Gene Name</b>             | <b>Itga4</b>                                                                                                                                                                                                                |
| <b>UniProt Synonym Gene Names</b>    | LPAM subunit alpha                                                                                                                                                                                                          |
| <b>UniProt Entry Name</b>            | ITA4_MOUSE                                                                                                                                                                                                                  |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/integrin-alpha-4-itga4-antibody-flow-cytometry-western-blot-elisa/126990>