

Rabbit anti-Human, Mouse MVD Polyclonal Antibody | anti-MVD antibody

Anti-MVD Antibody Picoband

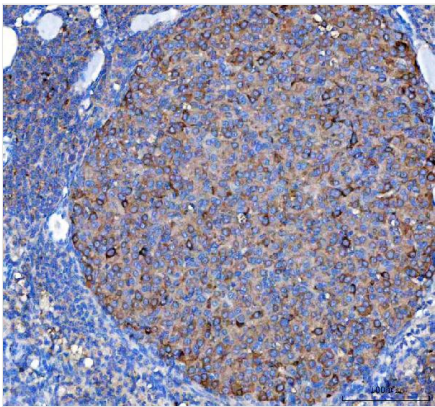
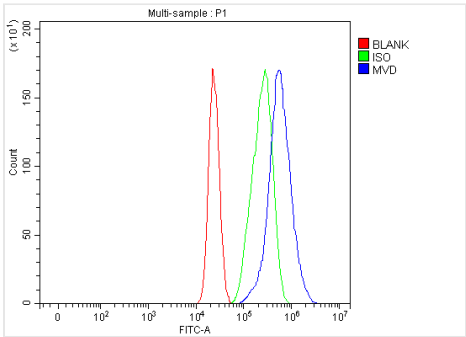
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127073	Rabbit	Human, Mouse	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

MVD; Polyclonal Antibody; Anti-MVD 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-MVD antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse
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-MVD antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human MVD recombinant protein (Position: E62-Q374).
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.

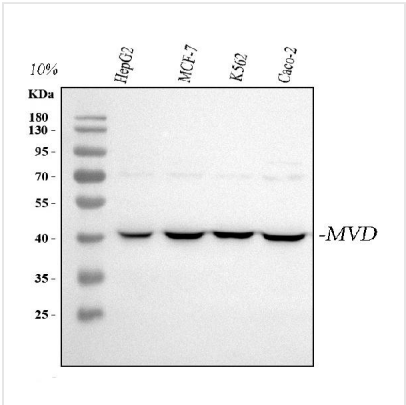


FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of MCF-7 cells using anti-MVD antibody (AAA127073).Overlay histogram showing MCF-7 cells stained with AAA127073 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MVD Antibody (AAA127073, 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.

IHC (Immunohistochemistry)

Figure 2. IHC analysis of MVD using anti-MVD antibody (AAA127073).MVD was detected in a paraffin-embedded section of mouse ovary tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MVD Antibody (AAA127073) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of MVD using anti-MVD antibody (AAA127073).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: human HepG2 whole cell lysates,Lane 2: human MCF-7 whole cell lysates,Lane 3: human K562 whole cell lysates,Lane 4: human Caco-2 whole cell 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-MVD antigen affinity purified polyclonal antibody (#AAA127073) at 0.25ug/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 MVD at approximately 43 kDa. The expected band size for MVD is at 43 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MVD 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-MVD antibody	Primary Antibodies; Signal Transduction; Signaling Pathway; Small G Proteins

References	1. Luan, J., Niu, Z., Zhang, J., Crosby, M. E., Zhang, Z., Chu, X., Wang, Z., Huang, W., Xiang, L., Zheng, Z. A novel locus for disseminated superficial actinic porokeratosis maps to chromosome 16q24.1-24.3. Hum. Genet. 129: 329-334, 2011.2. Toth, M. J., Huwyler, L. Molecular cloning and expression of the cDNAs encoding human and yeast mevalonate pyrophosphate decarboxylase. J. Biol. Chem. 271: 7895-7898, 1996.3. Zhang, Z., Li, C., Wu, F., Ma, R., Luan, J., Yang, F., Liu, W., Wang, L., Zhang, S., Liu, Y., Gu, J., Hua, W., and 13 others. Genomic variations of the mevalonate pathway in porokeratosis.eLife 4: e06322, 2015. Note: Electronic Article. Erratum: eLife 5: e14383, 2016.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4505289
NCBI GeneID	4597
NCBI Accession #	NP_002452.1
NCBI GenBank Nucleotide #	NM_002461.2
UniProt Accession #	P53602; Q53Y65
Molecular Weight	43,405 Da
NCBI Official Full Name	diphosphomevalonate decarboxylase
NCBI Official Synonym Full Names	mevalonate (diphospho) decarboxylase
NCBI Official Symbol	MVD
NCBI Official Synonym Symbols	MPD; MDDase; FP17780
NCBI Protein Information	diphosphomevalonate decarboxylase; mevalonate pyrophosphate decarboxylase
UniProt Protein Name	Diphosphomevalonate decarboxylase
UniProt Gene Name	MVD
UniProt Synonym Gene Names	MPD; MDDase
UniProt Entry Name	MVD1_HUMAN

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