

Rabbit anti-Human MVK Polyclonal Antibody | anti-MVK antibody

Anti-MVK Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19776	Rabbit	Human	Western Blot, Immunohistochemistry, Immunocytochemistry, Immunofluorescence, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

MVK; Polyclonal Antibody; Anti-MVK Antibody Picoband; anti-MVK antibody

PRODUCT SPECIFICATIONS

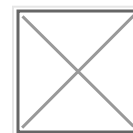
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-MVK antibody	WB (Western Blot), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry), ELISA
Application Notes	WB: 0.25-0.5ug/ml, Human IHC: 2-5ug/ml, Human ICC/IF: 5ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10 ⁶ cells, Human ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived human MVK recombinant protein (Position: K13-D394). Human MVK shares 80.8% and 81.4% amino acid (aa) sequence identity with mouse and rat MVK, respectively.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
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.

IMAGES



WB (Western Blot)

Figure 6. Western blot analysis of MVK using anti-MVK antibody (AAA19776).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.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-MVK antigen affinity purified polyclonal antibody (AAA19776) 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-DyLight 647 Conjugated secondary antibody at a dilution of 1:2000 for 1.5 hour at RT. A specific band was detected for MVK at approximately 42 kDa. The expected band size for MVK is at 42 kDa.



FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of U251 cells using anti-MVK antibody (AAA19776).Overlay histogram showing U251 cells stained with AAA19776 (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-MVK Antibody (AAA19776, 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 without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF (Immunofluorescence)

Figure 4. IF analysis of MVK using anti-MVK antibody (AAA19776).MVK was detected in an immunocytochemical section of HELA cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MVK Antibody (AAA19776) 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 (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-MVK Antibody (AAA19776) 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 (Lane 2: human RT4 whole cell lysates,Lane 3: human HepG2 whole cell lysates,Lane 4: human MCF-7 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-MVK antigen affinity purified polyclonal antibody (#AAA19776) 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 MVK at approximately 42 kDa. The expected band size for MVK is at 42 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-MVK 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-MVK antibody	Primary Antibodies
References	1. Balgobind, B., Wittebol-Post, D., Frenkel, J. Retinitis pigmentosa in mevalonate kinase deficiency. J. Inherit. Metab. Dis. 28: 1143-1145, 2005.2. Brito, T., Banganho, D., Pedrosa, C., Neves, J. F. Homozygous V377I mutation causing mevalonate kinase. BMJ Case Rep. 15: e249135, 2022.3. Cuisset, L., Drenth, J. P. H., Simon, A., Vincent, M. F., van der Velde Visser, S., van der Meer, J. W. M., Grateau, G., Delpech, M., International Hyper-IgD Study Group. Molecular analysis of MVK mutations and enzymatic activity in hyper-IgD and periodic fever syndrome. Europ. J. Hum. Genet. 9: 260-266, 2001.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4557769
NCBI GeneID	4598
NCBI Accession #	NP_000422.1
NCBI GenBank Nucleotide #	NM_000431.2
UniProt Accession #	Q03426
Molecular Weight	42,451 Da
NCBI Official Full Name	mevalonate kinase
NCBI Official Synonym Full Names	mevalonate kinase
NCBI Official Symbol	MVK
NCBI Official Synonym Symbols	MK; LRBP; MVLK; POROK3
NCBI Protein Information	mevalonate kinase; mevalonate kinase 1; LH receptor mRNA-binding protein
UniProt Protein Name	Mevalonate kinase

UniProt Gene Name	MVK
UniProt Synonym Gene Names	MK
UniProt Entry Name	KIME_HUMAN

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/mvk-antibody-western-blot-immunohistochemistry-immunocytochemistry-immunofluorescence-flow-cytometry-elisa/19776>