

Mouse anti-Human IVD Monoclonal Antibody | anti-IVD antibody

Anti-IVD Antibody, Mouse Monoclonal

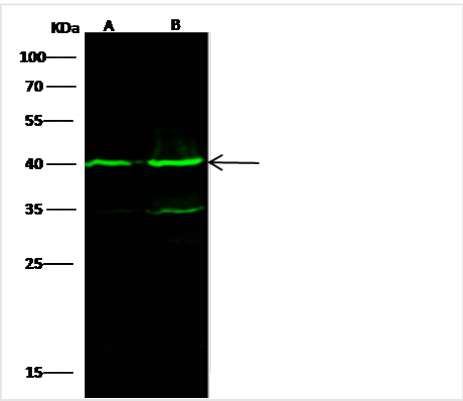
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255728	Mouse	Human	Immunoprecipitation, Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay, ELISA, Western Blot

PRODUCT SYNONYMS

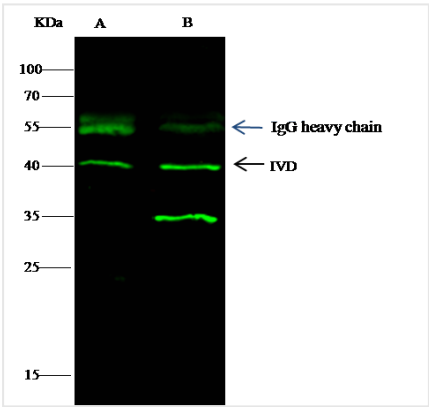
IVD; Monoclonal Antibody; Anti-IVD Antibody; Mouse Monoclonal; Isovaleryl-CoA dehydrogenase/IVD Antibody; Mouse MAb; isovaleryl-CoA dehydrogenase; Anti-ACAD2 Antibody; anti-IVD antibody

PRODUCT SPECIFICATIONS

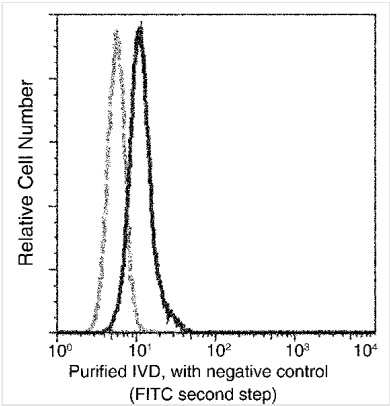
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	04
Specificity	Human Isovaleryl-CoA dehydrogenase/IVD. No cross-reactivity in ELISA with Insect cell lysate
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-IVD antibody	IP (Immunoprecipitation), IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry), ELISA, WB (Western Blot)
Immunogen	Recombinant Human Isovaleryl-CoA dehydrogenase/IVD protein
Conjugation	Unconjugated
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human Isovaleryl-CoA dehydrogenase/IVD (rh Isovaleryl-CoA dehydrogenase/IVD). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.



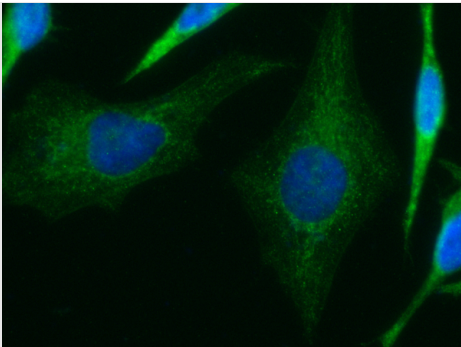
WB (Western Blot)
Anti-IVD mouse monoclonal antibody at 1:500 dilution
Lane A: Jurkat Whole Cell Lysate
Lane B: HeLa Whole Cell Lysate
Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Mouse IgG H&L (Dylight800) at 1/15000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 47 kDa Observed band size: 40 kDa



IP (Immunoprecipitation)
IVD was immunoprecipitated using:
Lane A: 0.5 mg Jurkat Whole Cell Lysate
Lane B: 0.5 mg A549 Whole Cell Lysate
0.5 uL anti-IVD mouse monoclonal antibody and 15 uL of 50 % Protein G agarose. Primary antibody: Anti-IVD mouse monoclonal antibody, at 1:500 dilution
Secondary antibody: Dylight 800-labeled antibody to Mouse IgG (H+L), at 1:7500 dilution
Developed using the odyssey technique. Performed under reducing conditions. Predicted band size: 40 kDa Observed band size: 40 kDa



FCM/FACS (Flow Cytometry)
Flow cytometric analysis of Human IVD expression on HeLa cells. The cells were treated according to manufacturer's manual (BD Pharmingen®), stained with purified anti-Human IVD, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.



IF (Immunofluorescence)
Immunofluorescence staining of Human IVD in HeLa cells. Cells were fixed with 4% PFA, permeabilized with 0.3% Triton X-100 in PBS, blocked with 10% serum, and incubated with Mouse anti-Human IVD monoclonal antibody (1:300) at 37 degree C 1 hour. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.

ADDITIONAL INFORMATION

Related Product Information for anti-IVD antibody	IVD (Isovaleryl-CoA Dehydrogenase) is a Protein Coding gene. IVD is a mitochondrial matrix enzyme that catalyzes the third step in leucine catabolism. IVD plays an essential role in processing proteins obtained from the diet. The body breaks down proteins from food into smaller parts called amino acids. Amino acids can be further processed to provide energy for growth and development. Isovaleryl-CoA dehydrogenase helps process a particular amino acid called leucine. Specifically, isovaleryl-CoA dehydrogenase is responsible for the third step in the breakdown of leucine. This step is a chemical reaction that converts a molecule called isovaleryl-CoA to another molecule, 3-methylcrotonyl-CoA. Additional chemical reactions convert 3-methylcrotonyl-CoA into molecules that are used for energy.
References	BACHHAWAT BK, et al. (1956) Enzymatic carboxylation of beta-hydroxyisovaleryl coenzyme A. J Biol Chem. 219(2):539-50. Ikeda Y, et al. (1983) Purification and characterization of isovaleryl coenzyme A dehydrogenase from rat liver mitochondria. J Biol Chem. 258(2):1077-85. Tanaka K, et al. (1966) Enzymatic carboxylation of beta-hydroxyisovaleryl coenzyme A. J Biol Chem. 219(2):539-50.

NCBI AND UNIPROT INFORMATION

NCBI GI #	16877964
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NCBI GeneID	3712
Molecular Weight	42,724 Da
NCBI Official Full Name	Isovaleryl Coenzyme A dehydrogenase
NCBI Official Synonym Full Names	isovaleryl-CoA dehydrogenase
NCBI Official Symbol	IVD
NCBI Official Synonym Symbols	ACAD2
NCBI Protein Information	isovaleryl-CoA dehydrogenase, mitochondrial; isovaleryl CoA dehydrogenase; isovaleryl Coenzyme A dehydrogenase

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/monoclonal/ivd-antibody-clone-04-immunoprecipitation-immunofluorescence-immunocytochemistry-flow-cytometry-western-blot-elisa/255728>