

Rabbit PRODH Polyclonal Antibody | anti-PRODH antibody

Anti-PRODH Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127169	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PRODH; Polyclonal Antibody; Anti-PRODH Antibody Picoband; Thrombopoietin; peptidylprolyl isomerase B; Peptidyl-prolyl cis-trans isomerase B; PPIase B; 5.2.1.8; CYP-S1; Cyclophilin B; Rotamase B; S-cyclophilin; SCYLP; PPIB; CYPB; anti-PRODH antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Found mainly in the liver, kidney and skeletal muscle.
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-PRODH antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived human PRODH recombinant protein (Position: H116-E433).
Subcellular Localization	Endoplasmic reticulum lumen
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	PPIases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.
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



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of RT4 cells using anti-PRODH antibody (AAA127169).Overlay histogram showing RT4 cells stained with AAA127169 (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-PRODH Antibody (AAA127169, 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 PRODH using anti-PRODH antibody (AAA127169).PRODH was detected in a paraffin-embedded section of human lung adenocarcinoma 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-PRODH Antibody (AAA127169) 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 PRODH using anti-PRODH antibody (AAA127169). 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, Lane 3: mouse kidney 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-PRODH antigen affinity purified polyclonal antibody (#AAA127169) 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 PRODH at approximately 69 kDa. The expected band size for PRODH is at 69 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PRODH 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-PRODH antibody	Primary Antibodies; ER Proteins; Immunology; Protein Trafficking; Signal Transduction
References	1. Afenjar, A., Moutard, M.-L., Doummar, D., Guet, A., Rabier, D., Vermersch, A.-I., Mignot, C., Burglen, L., Heron, D., Thioulouse, E., de Villemeur, T. B., Campion, D., Rodriguez, D. Early neurological phenotype in 4 children with biallelic PRODH mutations. Brain Dev. 29: 547-552, 2007. 2. Baron, M. Genetics of schizophrenia and the new millennium: progress and pitfalls. Am. J. Hum. Genet. 68: 299-312, 2001. 3. Bender, H.-U., Almashanu, S., Steel, G., Hu, C.-A., Lin, W.-W., Willis, A., Pulver, A., Valle, D. Functional consequences of PRODH missense mutations. Am. J. Hum. Genet. 76: 409-420, 2005.

NCBI AND UNIPROT INFORMATION

NCBI GI #	183227691
NCBI GeneID	5625
NCBI Accession #	NP_057419.3
NCBI GenBank Nucleotide #	NM_016335.3
UniProt Accession #	O43272; O14680; Q0P507; Q147W8; Q504W1; Q59FI8; Q6NV86; Q9UF13; A6NF53
Molecular Weight	59,231 Da
NCBI Official Full Name	proline dehydrogenase, mitochondrial
NCBI Official Synonym Full Names	proline dehydrogenase (oxidase) 1
NCBI Official Symbol	PRODH
NCBI Official Synonym Symbols	POX; PIG6; HSPOX2; PRODH1; PRODH2; TP53I6
NCBI Protein Information	proline dehydrogenase 1, mitochondrial; proline oxidase 2; p53-induced gene 6 protein; proline oxidase, mitochondrial; tumor protein p53 inducible protein 6
UniProt Protein Name	Proline dehydrogenase 1, mitochondrial
UniProt Gene Name	PRODH
UniProt Synonym Gene Names	PIG6; POX2
UniProt Entry Name	PROD_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/prodh-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/127169>