

Rabbit DPYS Polyclonal Antibody | anti-DPYS antibody

Anti-DPYS Antibody Picoband

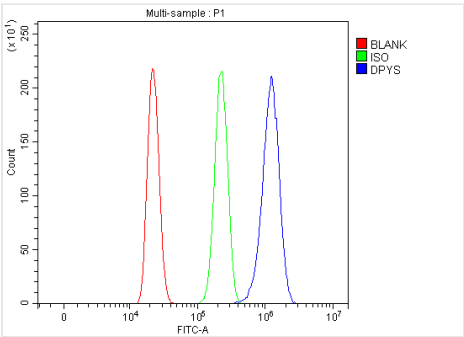
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127597	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

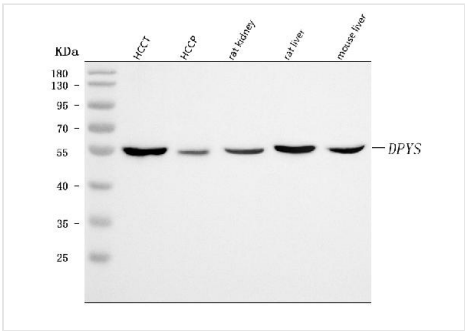
DPYS; Polyclonal Antibody; Anti-DPYS Antibody Picoband; penta-EF-hand domain containing 1; Peflin; PEF protein with a long N-terminal hydrophobic domain; Penta-EF hand domain-containing protein 1; PEF1; ABP32; UNQ1845; PRO3573; anti-DPYS antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Pre-B-cells and B-cells but not terminally differentiated plasma cells.
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-DPYS antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human DPYS recombinant protein (Position: D100-P518).
Subcellular Localization	Endoplasmic reticulum. Cytoplasm. Membrane. Peripheral membrane protein. COPII-coated vesicle membrane. Peripheral membrane protein
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	Calcium-binding protein that acts as an adapter that bridges unrelated proteins or stabilizes weak protein-protein complexes in response to calcium. Together with PDCD6, acts as calcium-dependent adapter for the BCR (KLHL12) complex, a complex involved in endoplasmic reticulum (ER)-Golgi transport by regulating the size of COPII coats. In response to cytosolic calcium increase, the heterodimer formed with PDCD6 interacts with, and bridges together the BCR (KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export, which is required for neural crest specification. Its role in the heterodimer formed with PDCD6 is however unclear: some evidences show that PEF1 and PDCD6 work together and promote association between PDCD6 and SEC31 in presence of calcium. Other reports show that PEF1 dissociates from PDCD6 in presence of calcium, and may act as a negative regulator of PDCD6. Also acts as a negative regulator of ER-Golgi transport; possibly by inhibiting interaction between PDCD6 and SEC31.
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 HL-60 cells using anti-DPYS antibody (AAA127597). Overlay histogram showing HL-60 cells stained with AAA127597 (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-DPYS Antibody (AAA127597, 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.



WB (Western Blot)
Figure 1. Western blot analysis of DPYS using anti-DPYS antibody (AAA127597). 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 hepatocellular carcinoma tumor tissue (HCCT) lysates, Lane 2: human hepatocellular carcinoma paracancerous tissue (HCCP) lysates, Lane 3: rat kidney tissue lysates, Lane 4: rat liver tissue lysates, Lane 5: 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-DPYS antigen affinity purified polyclonal antibody (#AAA127597) 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 DPYS at approximately 57 kDa. The expected band size for DPYS is at 57 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-DPYS 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-DPYS antibody	Primary Antibodies; Epigenetics and Nuclear Signaling; Mediator Complex; Transcription
References	1. Hamajima, N., Kouwaki, M., Vreken, P., Matsuda, K., Sumi, S., Imaeda, M., Ohba, S., Kidouchi, K., Nonaka, M., Sasaki, M., Tamaki, N., Endo, Y., De Abreu, R., Rotteveel, J., van Kuilenburg, A., van Gennip, A., Togari, H., Wada, Y. Dihydropyrimidinase deficiency: structural organization, chromosomal localization, and mutation analysis of the human dihydropyrimidinase gene. Am. J. Hum. Genet. 63: 717-726, 1998.2. Hamajima, N., Matsuda, K., Sakata, S., Tamaki, N., Sasaki, M., Nonaka, M. A novel gene family defined by human dihydropyrimidinase and three related proteins with differential tissue distribution. Gene 180: 157-163, 1996. 3. Nakajima, Y., Meijer, J., Dobritzsch, D., Ito, T., Zhang, C., Wang, X., Watanabe, Y., Tashiro, K., Meinsma, R., Roelofsen, J., Zoetekouw, L., van Kuilenburg, A. B. P. Dihydropyrimidinase deficiency in four East Asian patients due to novel and rare DPYS mutations affecting protein structural integrity and catalytic activity. Molec. Genet. Metab. 122: 216-222, 2017.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4503375
NCBI GeneID	1807
NCBI Accession #	NP_001376.1
NCBI GenBank Nucleotide #	NM_001385.2
UniProt Accession #	Q14117
Molecular Weight	56,630 Da
NCBI Official Full Name	dihydropyrimidinase
NCBI Official Synonym Full Names	dihydropyrimidinase

NCBI Official Symbol	DPYS
NCBI Official Synonym Symbols	DHP; DHPase
NCBI Protein Information	dihydropyrimidinase
UniProt Protein Name	Dihydropyrimidinase
UniProt Gene Name	DPYS
UniProt Synonym Gene Names	DHP; DHPase

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/dpys-antibody-flow-cytometry-western-blot-elisa/127597>