

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

Anti-PNP Antibody (monoclonal, 7G5)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125910	Mouse	Human	Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

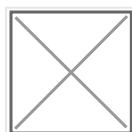
PRODUCT SYNONYMS

PNP; Monoclonal Antibody; Anti-PNP Antibody (monoclonal; 7G5); Inosine phosphorylase; NP; Np1; Nucleoside phosphorylase; Pnp1; PRO1837; PUNP; purine nucleoside phosphorylase; anti-PNP antibody

PRODUCT SPECIFICATIONS

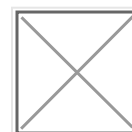
Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2b
Clone Number	7G5
Specificity	Mouse IgG monoclonal antibody for PNP detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-PNP antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human PNP (161-189aa AMSDAYDRTMRQALSTWKQMGEQRELQE), different from the related mouse sequence by six amino acids, and from the related rat sequence by five amino acids.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



IF (Immunofluorescence)

Figure 4. IF analysis of PNP using anti- PNP antibody (AAA125910).PNP was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5µg/mL mouse anti- PNP Antibody (AAA125910) overnight at 4 degree C. DyLight488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 3. IHC analysis of PNP using anti-PNP antibody (AAA125910).PNP was detected in paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-PNP Antibody (AAA125910) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of PNP using anti-PNP antibody (AAA125910). PNP was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2µg/ml mouse anti-PNP Antibody (AAA125910) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of PNP using anti-PNP antibody (AAA125910). 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 30µg of sample under reducing conditions. Lane 1: human HEK293 whole cell lysates Lane 2: human PC-3 whole cell lysates Lane 3: human U87 whole cell lysates Lane 4: human A549 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-PNP antigen affinity purified monoclonal antibody (Catalog # AAA125910) at 0.5 µg/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-mouse IgG-HRP secondary antibody at a dilution of 1:10000 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 PNP at approximately 32KD. The expected band size for PNP is at 32KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PNP antibody	The PNP gene encodes purine nucleoside phosphorylase, an enzyme that catalyzes the reversible phosphorolysis of the purine nucleosides and deoxynucleosides inosine, guanosine, deoxyinosine, and deoxyguanosine. It is presented results from gene dosage studies consistent with assignment of the PNP locus to band 14q13. PNP is expressed in most tissues, with markedly greater expression in lymphoid tissues. Genetic deficiencies of PNP result in severely compromised T lymphocyte function and neurologic dysfunction.
References	<ol style="list-style-type: none">Williams, S. R., Goddard, J. M., Martin, D. W., Jr. Human purine nucleoside phosphorylase cDNA sequence and genomic clone characterization. Nucleic Acids Res. 12: 5779-5787, 1984.Frecker, M., Dallaire, L., Young, S. R., Chen, G. C. C., Simpson, N. E. Confirmation of regional assignment of nucleoside phosphorylase (NP) on chromosome 14 by gene dosage studies. Hum. Genet. 45: 167-173, 1978.Markert, M. L., Finkel, B. D., McLaughlin, T. M., Watson, T. J., Collard, H. R., McMahon, C. P., Andrews, L. G., Barrett, M. J., Ward, F. E. Mutations in purine nucleoside phosphorylase deficiency. Hum. Mutat. 9: 118-121, 1997.

NCBI AND UNIPROT INFORMATION

NCBI GI #	157168362
NCBI GeneID	4860
NCBI Accession #	NP_000261.2
NCBI GenBank Nucleotide #	NM_000270.3
UniProt Accession #	P00491; Q15160; Q5PZ03; B2R8S5; D3DS00
Molecular Weight	32,118 Da
NCBI Official Full Name	purine nucleoside phosphorylase
NCBI Official Synonym Full Names	purine nucleoside phosphorylase
NCBI Official Symbol	PNP
NCBI Official Synonym Symbols	NP; PUNP; PRO1837
NCBI Protein Information	purine nucleoside phosphorylase; inosine phosphorylase; inosine-guanosine phosphorylase; purine-nucleoside:orthophosphate ribosyltransferase
UniProt Protein Name	Purine nucleoside phosphorylase
UniProt Gene Name	PNP
UniProt Synonym Gene Names	NP; PNP
UniProt Entry Name	PNPH_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/monoclonal/pnp-antibody-clone-7g5-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125910>