

## DESCRIPTION

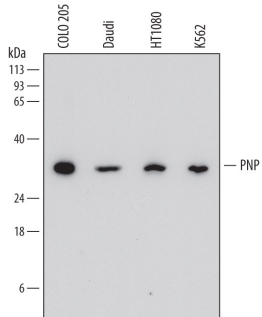
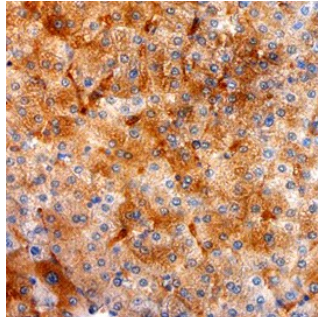
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Purine Nucleoside Phosphorylase/PNP in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 773511
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Purine Nucleoside Phosphorylase/PNP Met1-Ser289 Accession # P00491
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	0.5 µg/mL	See Below
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human Purine Nucleoside Phosphorylase/PNP by Western Blot.</b> Western blot shows lysates of COL0 205 human colorectal adenocarcinoma cell line, Daudi human Burkitt's lymphoma cell line, HT1080 human fibrosarcoma cell line, and K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human Purine Nucleoside Phosphorylase/PNP Monoclonal Antibody (Catalog # MAB6486) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for Purine Nucleoside Phosphorylase/PNP at approximately 32 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunohistochemistry</b></p>  <p><b>Purine Nucleoside Phosphorylase/PNP in Human Liver.</b> Purine Nucleoside Phosphorylase/PNP was detected in immersion fixed paraffin-embedded sections of human liver using Mouse Anti-Human Purine Nucleoside Phosphorylase/PNP Monoclonal Antibody (Catalog # MAB6486) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell &amp; Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to endothelial cells in bile canaliculi. View our protocol for <a href="#">Chromogenic IHC Staining of Paraffin-embedded Tissue Sections</a>.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Purine Nucleoside Phosphorylase (PNP) catalyzes the phosphorolysis of N-ribosidic bonds of purine nucleosides and deoxynucleosides. Physiological substrates of PNP include inosine, guanosine, and 2'-deoxyguanosine, but not adenosine (1). 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 (2, 3). PNP is used in assays for the measurement of inorganic phosphate (4).

### References:

1. Schramm, V.L. (1998) *Annu. Rev. Biochem.* **67**:693.
2. Stoop, W. *et al.* (1977) *N. Eng. J. Med.* **296**:651.
3. Markert, M.L. (1991) *Immunodef. Rev.* **3**:45.
4. Webb, M.R. (1992) *Proc. Natl. Acad. Sci. USA.* **89**:4884.