Human Purine Nucleoside Phosphorylase/ PNP Antibody

Antigen Affinity-purified Polyclonal Sheep IgG

Catalog Number: AF6486

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Purine Nucleoside Phosphorylase/PNP in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human Purine Nucleoside Phosphorylase/PNP Met1-Ser289 Accession # P00491
Formulation	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.

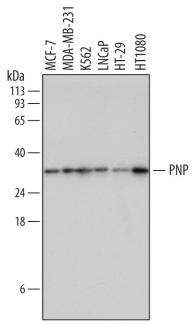
APPLICATIONS

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
Western Blot	1 µg/mL	See Below
Simple Western	50 µg/mL	See Below

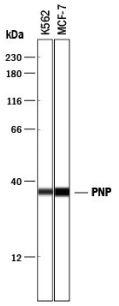
DATA

Western Blot



Detection of Human Purine Nucleoside Phosphorylase/ PNP by Western Blot. Western blot shows lysates of MCF-7 human breast cancer cell line, MDA-MB-231 human breast cancer cell line, K562 human chronic myelogenous leukemia cell line, LNCaP human prostate cancer cell line, HT-29 human colon adenocarcinoma cell line, and HT1080 human fibrosarcoma cell line. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Purine Nucleoside Phosphorylase/PNP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6486) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). 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.

Simple Western



Detection of Human Purine Nucleoside Phosphorylase/PNP by Simple Western™. Simple Western lane view shows lysates of K562 human chronic myelogenous leukemia cell line and MCF-7 human breast cancer cell line, loaded at 0.2 mg/mL. A specific band was detected for Purine Nucleoside Phosphorylase/PNP at approximately 36 kDa (as indicated) using 50 µg/mL of Sheep Anti-Human Purine Nucleoside Phosphorylase/PNP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6486) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.2 mg/mL.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Purine Nucleoside Phosphorylase (PNP) catalyzes the phophorolysis 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) Immunodefic. Rev. **3**:45.
4. Webb, M.R. (1992) Proc. Natl. Acad. Sci. USA. **89**:4884.

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