10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PSA Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6563c

Specification

PSA Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P55786
Other Accession	Q11011
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**103276**
Antigen Region	**536-565**

PSA Antibody (Center) - Additional Information

Gene ID 9520

Other Names
Puromycin-sensitive aminopeptidase, PSA, Cytosol alanyl aminopeptidase, AAP-S, NPEPPS, PSA

Target/Specificity
This PSA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 536-565 amino acids from the Central region of human PSA.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PSA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PSA Antibody (Center) - Protein Information

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Name NPEPPS

Synonyms PSA

Function Aminopeptidase with broad substrate specificity for several peptides. Involved in proteolytic events essential for cell growth and viability. May act as regulator of neuropeptide activity. Plays a role in the antigen-processing pathway for MHC class I molecules. Involved in the N-terminal trimming of cytotoxic T-cell epitope precursors. Digests the poly-Q peptides found in many cellular proteins. Digests tau from normal brain more efficiently than tau from Alzheimer disease brain.

Cellular Location
Cytoplasm, cytosol. Nucleus

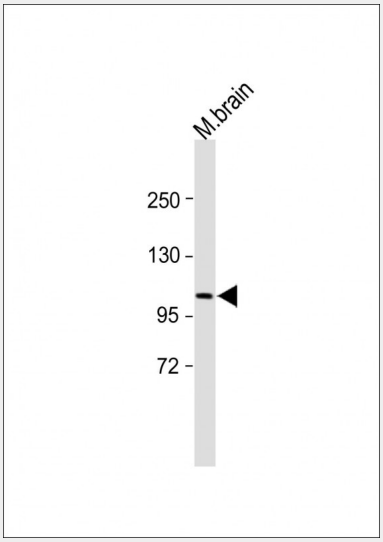
Tissue Location
Detected in liver, epithelium of renal tubules, epithelium of small and large intestine, gastric epithelial cells, and alveoli of the lung (at protein level).

PSA Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PSA Antibody (Center) - Images



All lanes : Anti-PSA Antibody (Center) at 1:2000 dilution Lane 1: mouse brain tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 110kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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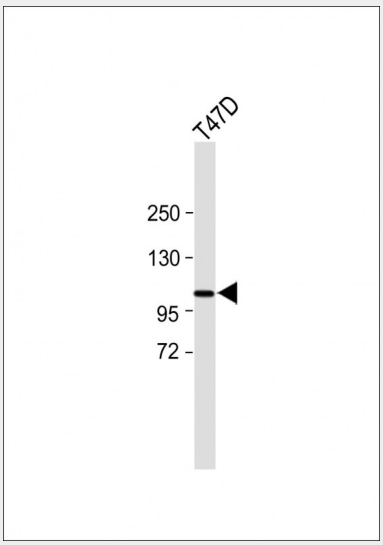
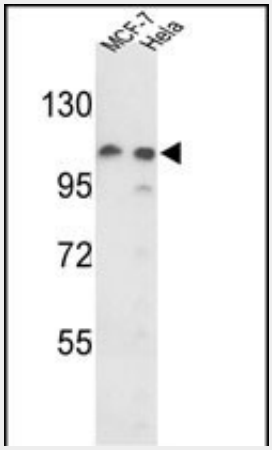
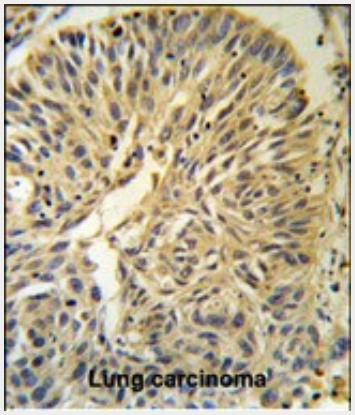


All lanes : Anti-PSA Antibody (Center) at 1:2000 dilution Lane 1: T47D whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG/A/M(H/L), Peroxidase conjugated at 1/2000 dilution. Observed band size : 110kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of PSA Antibody (Center) (Cat. #AP6563c) in MCF-7 and Hela cell line lysates (35ug/lane). PSA (arrow) was detected using the purified Pab.



PSA Antibody (Center) (Cat. #AP6563c) IHC analysis in formalin fixed and paraffin embedded human Lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the PSA Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.

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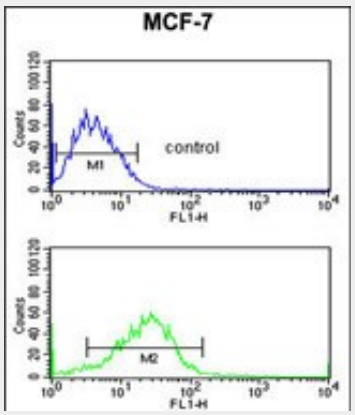

PSA Antibody (Center) (Cat. #AP6563c) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

PSA Antibody (Center) - Background

PSA is the puromycin-sensitive aminopeptidase, a zinc metallopeptidase which hydrolyzes amino acids from the N-terminus of its substrate. The protein has been localized to both the cytoplasm and to cellular membranes. This enzyme degrades enkaphalins in the brain, and studies in mouse suggest that it is involved in proteolytic events regulating the cell cycle.

PSA Antibody (Center) - References

Thompson,M.W., Peptides 24 (9), 1359-1365 (2003)