abcam

Product datasheet

Anti-PSMA antibody [EP3254] ab79542

Recombinant

RabMAb

3 Images

Overview

Product name Anti-PSMA antibody [EP3254]

Description Rabbit monoclonal [EP3254] to PSMA

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt, IHC-P or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide within Human PSMA aa 350-450 (C terminal). The exact sequence is

proprietary.

Positive control LnCap lysate. LnCap cells.

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

Storage buffer pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

Purity Protein A purified

Clonality Monoclonal

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Clone number EP3254

Isotype IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab79542 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 100-120 kDa (predicted molecular weight: 84 kDa). For unpurified, use 1/1000.

Application notes

Is unsuitable for Flow Cyt,IHC-P or IP.

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Function

Has both folate hydrolase and N-acetylated-alpha-linked-acidic dipeptidase (NAALADase) activity. Has a preference for tri-alpha-glutamate peptides. In the intestine, required for the uptake of folate. In the brain, modulates excitatory neurotransmission through the hydrolysis of the neuropeptide, N-aceylaspartylglutamate (NAAG), thereby releasing glutamate. Isoform PSM-4 and isoform PSM-5 would appear to be physiologically irrelevant. Involved in prostate tumor progression.

Also exhibits a dipeptidyl-peptidase IV type activity. In vitro, cleaves Gly-Pro-AMC.

Tissue specificity

Highly expressed in prostate epithelium. Detected in urinary bladder, kidney, testis, ovary, fallopian tube, breast, adrenal gland, liver, esophagus, stomach, small intestine, colon and brain (at protein level). Detected in the small intestine, brain, kidney, liver, spleen, colon, trachea, spinal cord and the capillary endothelium of a variety of tumors. Expressed specifically in jejunum brush border membranes. In the brain, highly expressed in the ventral striatum and brain stem. Also expressed in fetal liver and kidney. Isoform PSMA' is the most abundant form in normal prostate. Isoform PSMA-1 is the most abundant form in primary prostate tumors. Isoform PSMA-2 is also found in normal prostate as well as in brain and liver. Isoform PSMA-9 is specifically expressed in prostate cancer.

Sequence similarities

Belongs to the peptidase M28 family. M28B subfamily.

Domain

The NAALADase activity is found in the central region, the dipeptidyl peptidase IV type activity in the C-terminal.

Post-translational

The first two amino acids at the N-terminus of isoform PSMA' appear to be cleaved by limited

proteolysis.

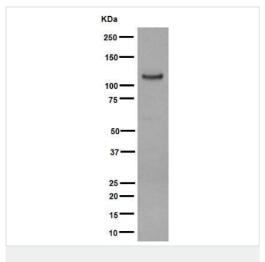
The N-terminus is blocked.

Cellular localization

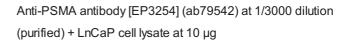
modifications

Cytoplasm and Cell membrane.

Images



Western blot - Anti-PSMA antibody [EP3254] (ab79542)



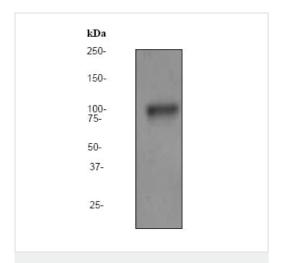
Secondary

HRP goat anti-rabbit (H+L) at 1/1000 dilution

Predicted band size: 84 kDa

Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



Western blot - Anti-PSMA antibody [EP3254] (ab79542)

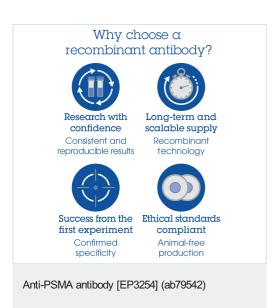
Anti-PSMA antibody [EP3254] (ab79542) at 1/5000 dilution (unpurified) + LnCap lysate at 10 µg

Secondary

HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 84 kDa

Observed band size: 100 kDa



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