




Product datasheet

Alexa Fluor® 488 Anti-PSMA antibody [GCP05] ab187570

★★★★★ [1 Abreviews](#) [1 Image](#)

Overview

Product name	Alexa Fluor® 488 Anti-PSMA antibody [GCP05]
Description	Alexa Fluor® 488 Mouse monoclonal [GCP05] to PSMA
Host species	Mouse
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm
Tested applications	Suitable for: Flow Cyt
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Pig 
Immunogen	Recombinant fragment corresponding to Human PSMA aa 1 to the C-terminus. Extracellular domain Database link: Q04609  Run BLAST with  Run BLAST with
Positive control	LNCaP cell line.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Store In the Dark.
Storage buffer	pH: 7.4 Preservative: 0.097% Sodium azide Constituents: 99% PBS, 0.2% BSA
Purity	Size exclusion
Clonality	Monoclonal

Clone number	GCP05
Isotype	IgG1

Applications

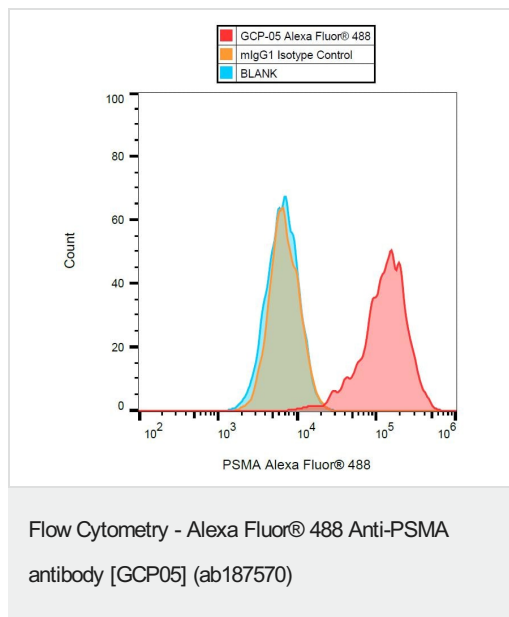
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab187570 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use a concentration of 5 µg/ml.

Target

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-acetylasparylglutamate (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 modifications	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	Cytoplasm and Cell membrane.

Images



Flow cytometry analysis (surface staining) of PSMA using ab187570 on LNCaP cell line.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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