

Datasheet for ABIN492596
anti-PSMA antibody



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1 Image

Overview

Quantity:	0.1 mg
Target:	PSMA (FOLH1)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This PSMA antibody is un-conjugated
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	LNCaP cell homogenate.
Clone:	107-1A4
Isotype:	IgG1
Specificity:	This antibody reacts with PSMA (100 kDa) on Flow Cytometry.
Cross-Reactivity (Details):	Species reactivity (tested):Human.
Characteristics:	Synonyms: Glutamate carboxypeptidase 2, Folate hydrolase 1, Prostate-specific membrane antigen,FOLH, NAALAD1, PSM, GCP2, NAALAdase, Glutamate carboxypeptidase II, Membraneglutamate carboxypeptidase, N-acetylated-alpha-linked acidic dipeptidase I,Pteroylpoly-gamma-glutamate carboxypeptidase, Folylpoly-gamma-glutamatecarboxypeptidase
Purification:	Protein-A Agarose Chromatography of hybridoma supernatant.

Target Details

Target:	PSMA (FOLH1)
Alternative Name:	PSMA / FOLH1 (FOLH1 Products)
Background:	PSMA is a type II transmembrane protein expressed at high levels in prostate cancer and in tumor-associated neovasculature. PSMA is also known as a glutamate carboxypeptidase II (EC 3.4.17.21) that hydrolyzes the neuropeptide, N-acetyl-L-aspartyl-L-glutamate, releasing glutamate, the dominant excitatory neurotransmitter/neuromodulator of the mammalian central nervous system. The ability of PSMA to liberate g-glutamate may allow the removal of glutamate residues from dietary folates, which are unable to be transported into cells in their poly-g-glutamate form. Overexpression of PSMA in prostate cancer cells may represent an advantageous adaptation that allows the uptake of folates required for rapid division. The exopeptidase activity exhibited by PSMA and its high-level overexpression in prostate cancer cells make it a potential target for selective anticancer therapy and prodrug activation. Synonyms: FOLH, Folate hydrolase 1, Folylpoly-gamma-glutamate carboxypeptidase, GCP2, Glutamate carboxypeptidase 2, Glutamate carboxypeptidase II, Membrane glutamate carboxypeptidase, N-acetylated-alpha-linked acidic dipeptidase I, NAALAD1, NAALAdase, PSM, Prostate-specific membrane antigen, Pteroylpoly-gamma-glutamate carboxypeptidase
Gene ID:	2346
UniProt:	Q04609

Application Details

Application Notes:	Flow Cytometry: 10 µg/mL (final concentration). Positive Control: LNCaP cell. Detailed procedure is provided in Protocols. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Protocol:	Flow Cytometric analysis for floating cells We usually use Fisher tubes or equivalents as reaction tubes for all steps described below. 1) Detach the cells from culture dish by using cell dissociation buffer 2) Wash the cells 3 times with washing buffer [PBS containing 2% fetal calf serum (FCS) and 0.1% NaN₃] 3) Resuspend the cells with washing buffer (5x10⁶ cells/mL) 4) Add 50 µL of the cell suspension into each tube, and centrifuge at 500 x g for 1 minute at room temperature (20~25°C). Remove supernatant by careful aspiration. 5) Add 20 µL of normal goat serum containing 1 mg/mL normal human IgG and 0.1% NaN₃ or 20 µL of Clear Back (human Fc receptor blocking reagent) to the cell pellet after tapping. Mix well and incubate for 5 minutes at room temperature. 6) Add 30 µL of the primary antibody at the concentration of as

Application Details

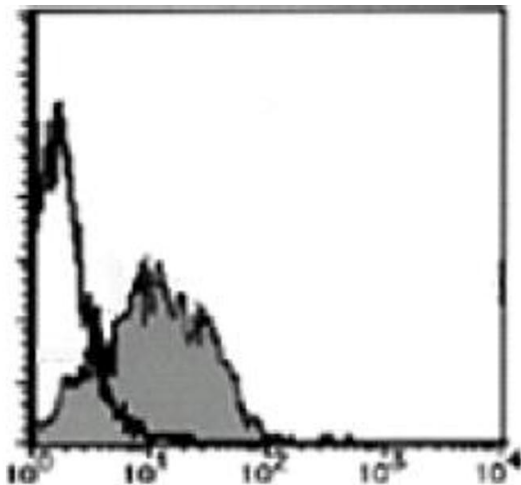
suggest in theAPPLICATIONS diluted in the washing buffer. Mix well and incubate for 30 minutes at roomtemperature. 7) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at roomtemperature. Remove supernatant by careful aspiration. 8) Add 30 µL of 1: 100 FITC conjugated anti-mouse IgG diluted with the washing buffer. Mixwell and incubate for 15 minutes at room temperature. 9) Add 1 mL of the washing buffer followed by centrifugation at 500 x g for 1 minute at roomtemperature. Remove supernatant by careful aspiration. 10) Resuspend the cells with 500 µL of the washing buffer and analyze by a flow cytometer. Positive Control: LNCaP

Restrictions: For Research Use only

Handling

Concentration:	1.0 mg/mL
Buffer:	PBS, pH 7.2 containing 50 % Glycerol without preservatives.
Preservative:	Without preservative
Storage:	-20 °C
Storage Comment:	Store the antibody (in aliquots) at -20 °C. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
Expiry Date:	12 months

Images



Flow Cytometry

Image 1.