Human PSMA/FOLH1/NAALADase I PE-conjugated Antibody

Monoclonal Mouse IgG_{2A} Clone # 460420

Catalog Number: FAB4234P

100 TESTS

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PSMA/FOLH1/NAALADase I in direct ELISAs and Western blots. In direct ELISAs, less than 10% cross-reactivity with recombinant human (rh) NAALADase-like 2 and no cross-reactivity with rhNAALADase-like 1, rhNAALADase-like 3, recombinant mouse (rm) PSMA/FOLH1/NAALADase I, or rmNAALAase-like 2 is observed.
Source	Monoclonal Mouse IgG_{2A} Clone # 460420
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant human PSMA/FOLH1/NAALADase I Lys44-Ala750 Accession # Q04609
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

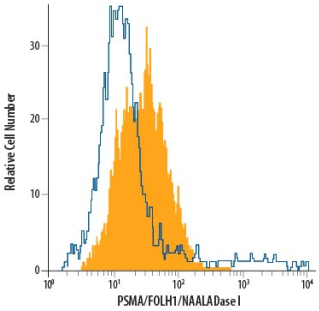
APPLICATIONS

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
Flow Cytometry	10 µL/10^6 cells	See Below

DATA

Flow Cytometry



Detection of PSMA/FOLH1/NAALADase I in LNCaP Human Cell Line by Flow Cytometry. LNCaP human prostate cancer cell line was stained with Mouse Anti-Human PSMA/FOLH1/NAALADase I PE-conjugated Monoclonal Antibody (Catalog # FAB4234P, filled histogram) or isotype control antibody (Catalog # IC003P, open histogram). View our protocol for Staining Membrane-associated Proteins.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Human prostate-specific membrane antigen (PSMA), a tumor marker in prostate cancer encoded by the FOLH1 gene, is a type II transmembrane zinc metallopeptidase that is most highly expressed in the nervous system, prostate, kidney, and small intestine (1, 2). The enzyme is also known as glutamate carboxypeptidase II (GCPII), folate hydrolase 1, folypoly-gamma-glutamate carboxypeptidase (FGCP), and N-acetylated-alpha-linked acidic dipeptidase I (NAALADase I). In the brain, PSMA hydrolyzes the neurotransmitter N-acetyl-Asp-Glu to produce glutamate, another neurotransmitter. Inhibition of brain PSMA activity is considered to be a promising approach for the treatment of neurological disorders associated with glutamate excitotoxicity, such as stroke, chronic pain, and amyotrophic lateral sclerosis (3). Intestinal PSMA hydrolyzes folylpoly-γ-glutamates, facilitating the uptake of folate (4).

References:

1. Silver, D.A. *et al.* (1997) Clin. Cancer Res. **3**:81.
2. Carter, R.E. *et al.* (1996) Pro. Natl. Acad. Sci. USA. **93**:749.
3. Jackson, P.F. and Slusher, B.S. (2001) Curr. Med. Chem. **8**:949.
4. Heston, W.D. (1997) Urology **49**:104.

bio-techne
bio-techne.com
Global info@bio-techne.com techsupport@bio-techne.com
North America TEL 800 343 7475 Europe | Middle East | Africa TEL +44 (0)1235 529449
China info.cn@bio-techne.com TEL +86 (21) 52380373
Rest of World bio-techne.com/find-us/distributors TEL +1 612 379 2956