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

FOLH1 Antibody (N-term) Blocking peptide
Synthetic peptide
Catalog # BP13707a

Specification

FOLH1 Antibody (N-term) Blocking peptide - Product Information

Primary Accession Q04609

FOLH1 Antibody (N-term) Blocking peptide - Additional Information

Gene ID 2346

Other Names
Glutamate carboxypeptidase 2, Cell growth-inhibiting gene 27 protein, Folate hydrolase 1, Folylpoly-gamma-glutamate carboxypeptidase, FGCP, Glutamate carboxypeptidase II, GCPII, Membrane glutamate carboxypeptidase, mGCP, N-acetylated-alpha-linked acidic dipeptidase I, NAALADase I, Prostate-specific membrane antigen, PSM, PSMA, Pteroylpoly-gamma-glutamate carboxypeptidase, FOLH1, FOLH, NAALAD1, PSM, PSMA

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13707a was selected from the N-term region of FOLH1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FOLH1 Antibody (N-term) Blocking peptide - Protein Information

Name FOLH1 (HGNC:3788)

Synonyms FOLH, NAALAD1, PSM, PSMA

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. Involved in prostate tumor progression.

Cellular Location

Cell membrane; Single-pass type II membrane protein

Tissue Location
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-9 is specifically expressed in prostate cancer

FOLH1 Antibody (N-term) Blocking peptide - Protocols

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

- Blocking Peptides

FOLH1 Antibody (N-term) Blocking peptide - Images

FOLH1 Antibody (N-term) Blocking peptide - Background

This gene encodes a type II transmembrane glycoproteinbelonging to the M28 peptidase family. The protein acts as aglutamate carboxypeptidase on different alternative substrates,including the nutrient folate and the neuropeptideN-acetyl-l-aspartyl-l-glutamate and is expressed in a number oftissues such as prostate, central and peripheral nervous system andkidney. A mutation in this gene may be associated with impairedintestinal absorption of dietary folates, resulting in low bloodfolate levels and consequent hyperhomocysteinemia. Expression ofthis protein in the brain may be involved in a number ofpathological conditions associated with glutamate excitotoxicity.In the prostate the protein is up-regulated in cancerous cells andis used as an effective diagnostic and prognostic indicator ofprostate cancer. This gene likely arose from a duplication event ofa nearby chromosomal region. Alternative splicing gives rise tomultiple transcript variants encoding several different isoforms.

FOLH1 Antibody (N-term) Blocking peptide - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)Giusti, B., et al. Thromb. Haemost. 104(2):231-242(2010)Jugessur, A., et al. PLoS ONE 5 (7), E11493 (2010) :Mlcochova, P., et al. Prostate 69(5):471-479(2009)Davis, M.I., et al. Proc. Natl. Acad. Sci. U.S.A. 102(17):5981-5986(2005)