

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
- Background**

This gene encodes a type II transmembrane glycoprotein belonging to the M28 peptidase family. The protein acts as a glutamate carboxypeptidase on different alternative substrates, including the nutrient folate and the neuropeptide N-acetyl-L-aspartyl-L-glutamate and is expressed in a number of tissues such as prostate, central and peripheral nervous system and kidney. A mutation in this gene may be associated with impaired intestinal absorption of dietary folates, resulting in low blood folate levels and consequent hyperhomocysteinemia. Expression of this protein in the brain may be involved in a number of pathological conditions associated with glutamate excitotoxicity. In the prostate the protein is up-regulated in cancerous cells and is used as an effective diagnostic and prognostic indicator of prostate cancer. This gene likely arose from a duplication event of a nearby chromosomal region. Alternative splicing gives rise to multiple 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)

**FOLH1 Antibody (N-term) Blocking peptide -
Protein Information****Name** FOLH1**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-3 is also found in normal prostate as well as in brain and liver 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](#)