

**FOLH1 Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13707A****Specification**

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**FOLH1 Antibody (N-term) - Product Information**

Application	IF, WB, IHC-P,E
Primary Accession	<a href="#">Q04609</a>
Other Accession	<a href="#">Q9CZR2</a> , <a href="#">Q9Y3Q0</a> , <a href="#">P70627</a> , <a href="#">O77564</a> , <a href="#">O35409</a> , <a href="#">NP_001180400.1</a> , <a href="#">NP_001014986.1</a>
Reactivity	Human
Predicted	Mouse, Pig, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	84331
Antigen Region	161-190

**FOLH1 Antibody (N-term) - 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**

This FOLH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 161-190 amino acids from the N-terminal region of human FOLH1.

**Dilution**

IF~~1:10~50  
WB~~1:1000  
IHC-P~~1:10~50

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

FOLH1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **FOLH1 Antibody (N-term) - 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**

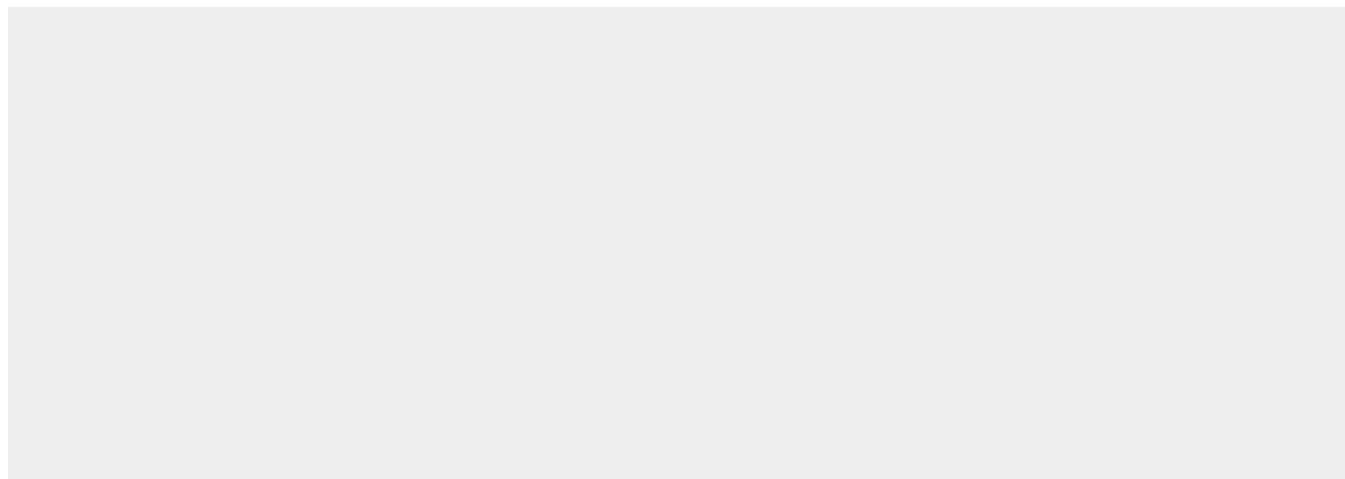
Highly expressed in prostate epithelium. Detected in urinary bladder, kidney, testis, ovary, fallopian tube, breast, adrenal gland, liver, esophagus, stomach, small intestine, colon and brain (at protein level). Detected in the small intestine, brain, kidney, liver, spleen, colon, trachea, spinal cord 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

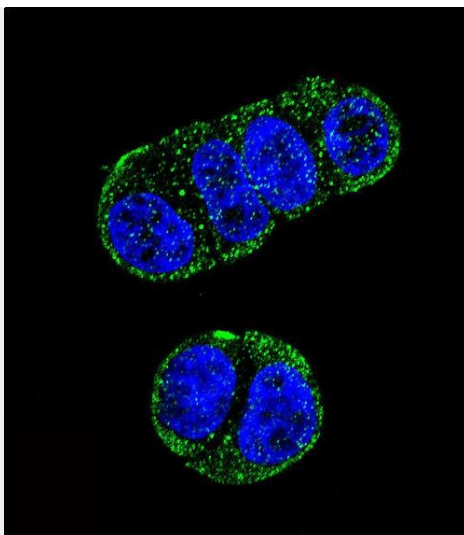
## **FOLH1 Antibody (N-term) - Protocols**

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

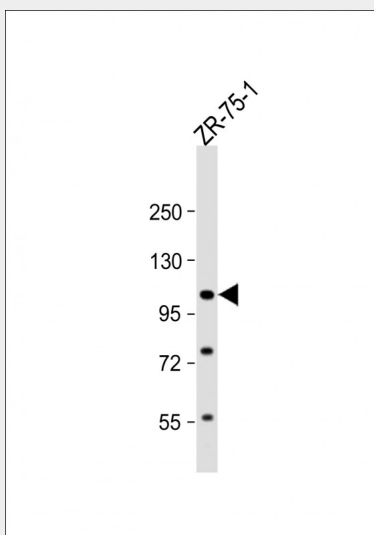
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## **FOLH1 Antibody (N-term) - Images**

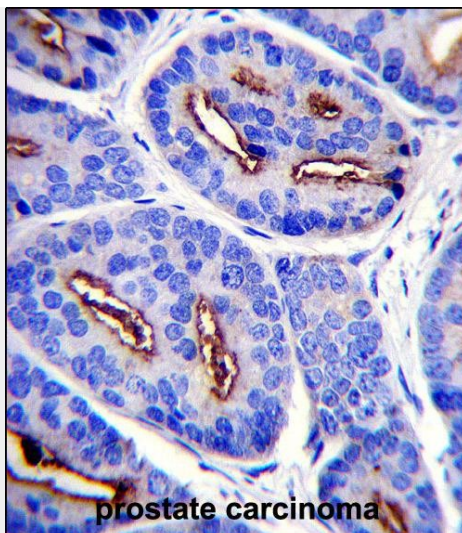




Confocal immunofluorescent analysis of FOLH1 Antibody (N-term)(Cat#AP13707a) with ZR-75-1 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



Anti-FOLH1 Antibody (N-term) at 1:1000 dilution + ZR-75-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 84 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



FOLH1 Antibody (N-term) (Cat. #AP13707a) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of FOLH1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

#### **FOLH1 Antibody (N-term) - 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) - 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)