



# Human FOLH1 peptide (DAG-P1045)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen Description</b>	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. [provided by RefSeq, Jul 2010]
<b>Specificity</b>	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, kid
<b>Conjugate</b>	Unconjugated
<b>Sequence Similarities</b>	Belongs to the peptidase M28 family. M28B subfamily.
<b>Format</b>	Liquid
<b>Preservative</b>	None
<b>Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

## GENE INFORMATION

**Gene Name** [FOLH1 folate hydrolase \(prostate-specific membrane antigen\) 1 \[ Homo sapiens \(human\) \]](#)

<b>Official Symbol</b>	FOLH1
<b>Synonyms</b>	FOLH1; folate hydrolase (prostate-specific membrane antigen) 1; PSM; FGCP; FOLH; GCP2; PSMA; mGCP; GCPII; NAALAD1; NAALAdase; glutamate carboxypeptidase 2; NAALADase I; glutamate carboxylase II; glutamate carboxypeptidase II; membrane glutamate carboxypeptidase; cell growth-inhibiting gene 27 protein; folylpoly-gamma-glutamate carboxypeptidase; prostate specific membrane antigen variant F; pteroylpoly-gamma-glutamate carboxypeptidase; N-acetylated alpha-linked acidic dipeptidase 1; N-acetylated-alpha-linked acidic dipeptidase I;
<b>Entrez Gene ID</b>	<a href="#">2346</a>
<b>mRNA Refseq</b>	<a href="#">NM_001014986.1</a>
<b>Protein Refseq</b>	<a href="#">NP_001014986.1</a>
<b>UniProt ID</b>	Q04609
<b>Chromosome Location</b>	11p11.2
<b>Pathway</b>	One Carbon Metabolism, organism-specific biosystem; Vitamin digestion and absorption, organism-specific biosystem; Vitamin digestion and absorption, conserved biosystem;
<b>Function</b>	carboxypeptidase activity; dipeptidase activity; metal ion binding; metallopeptidase activity; peptidase activity;