Active Recombinant Human FOLH1, His-tagged

Cat. No. FOLH1-2415H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human FOLH1(Lys44-Ala750), fused with an N-terminal 6-His tag, was expressed in CHO Cells.
Species	Human
Source	CHO
ProteinLength	44-750 a.a.
Description	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.
Predicted N Terminal	His
Form	Supplied as a 0.2 μm filtered solution in MES and NaCl.

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Bio-activity	Measured by its ability to hydrolyze the substrate N-acetyl-L-Asp-L-Glu into N-acetyl-L-Asp and L-Glu. The L-Glu product is measured by fluorescence after its derivatization by ortho-phthaldialdehyde. The specific activity is >400 pmol/min/μg.
Molecular Mass	Predicted Molecular Mass: 80 kDaSDS-PAGE: 110 kDa, reducing conditions
Endotoxin	< 1.0 EU per 1 μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Storage	Avoid repeated freeze-thaw cycles.6 months from date of receipt, -20 to -70 °C as supplied.3 months, -20 to -70 °C under sterile conditions after opening.

GENE INFORMATION

Gene Name	FOLH1 folate hydrolase (prostate-specific membrane antigen) 1 [Homo sapiens (human)]
Official Symbol	FOLH1
Synonyms	FOLH1; PSM; FGCP; FOLH; GCP2; PSMA; mGCP; GCPII; NAALAD1; NAALAdase; folate hydrolase (prostate-specific membrane antigen) 1; 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; NP_001014986.1; EC 3.4.17.21; NP_001180400.1; NP_001180401.1; NP_001180402.1; NP_004467.1
Gene ID	2346

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mRNA Refseq	NM_001014986
Protein Refseq	NP_001014986
MIM	600934
UniProt ID	Q04609
Chromosome Location	11p11.2
Pathway	One Carbon Metabolism; Vitamin digestion and absorption
Function	carboxypeptidase activity; dipeptidase activity; metal ion binding

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