

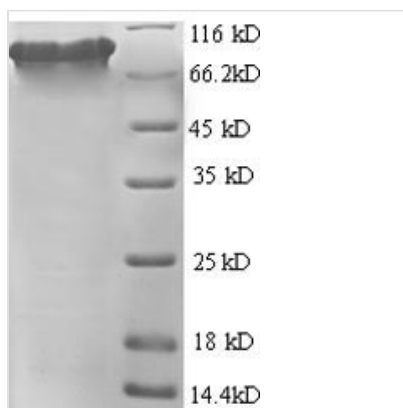


Recombinant Human Glutamate carboxypeptidase 2 (FOLH1), partial

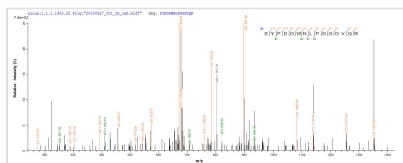
Product Code	CSB-EP008782HU
Relevance	Has both folate hydrolase and N-acetylated-alpha-linked-acidic dipeptidase (NAALADase) activity. Has a preference for tri-alpha-glutamate peptides. In the intestine, required for the uptake of folate. In the brain, modulates excitatory neurotransmission through the hydrolysis of the neuropeptide, N-aceylaspartylglutamate (NAAG), thereby releasing glutamate. Isoform PSM-4 and isoform PSM-5 would appear to be physiologically irrelevant. Involved in prostate tumor progression. Also exhibits a dipeptidyl-peptidase IV type activity. In vitro, cleaves Gly-Pro-AMC.
Abbreviation	Recombinant Human FOLH1 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q04609
Alias	Cell growth-inhibiting gene 27 protein;Folate hydrolase 1;Folylpoly-gamma-glutamate carboxypeptidase ;FGCP;Glutamate carboxypeptidase II ;GCPII;Membrane glutamate carboxypeptidase ;mGCPN-acetylated-alpha-linked acidic dipeptidase I ;NAALADase I;Prostate-specific membrane antigen ;PSM ;PSMAP;teroylpoly-gamma-glutamate carboxypeptidase
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	EATNITPKHNMKAFDELKAENIKKFLYNFTQIPHLAGTEQNFQLAKQIQSQWK EFGLDSVELAHYDVLLSYPNKTHPNYISIINEDGNEIFNTSLFEPPPPGYENVSDI VPPFSAFSPQGMPEGDLVYVNYARTEDFFKLERDMKINCSGKIVIARYGKVFR GNKVKNAGLAGAKGVILYSDPADYFAPGVKSYPDGWNLPGGGVQVRGNILNLN GAGDPLTPGYPANAYARRGIAEAVGLPSIPVHPIGYYDAQKLLKMGGSAPP DSSWRGSLKVPYNVGPFGFTGNFSTQKVKMHIHSTNEVTRIYNVIGTLRGAVEP DRYVILGGHRDSWVFGGIDPQSGAAVVHEIVRSFGTLKKEGWRPRRTILFASW DAEEFGLLGSTEWAEENSRLQERGVAYINADSSIEGNYTLRVDCTPLMYSLV HNLTKELKSPDEGFEGKSLYESWTKKSPSPEFSGMPRISKLGSNDFEVFFQ RLGIASGRARYTKNWETNKFSGYPLYHSVYETYELVEKFYDPMFKYHLTVAQV RGGMVFEANISIVLPFDCRDYAVVLRKYADKIYSISMKHPQEMKTYSVSFDLSF SAVKNFTEIASKFSERLQDFDKSNPIVLRMMNDQLMFLERAFIDPLGLPDRPFY RHVIYAPSSHNKYAGESFPGIYDALFDIESKVDPSKAWGEVQRQIYVAAFTVQA AAETLSEVA
Research Area	Cancer
Source	E.coli

Target Names	FOLH1
Expression Region	48-750aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	83.1kDa
Protein Length	Partial

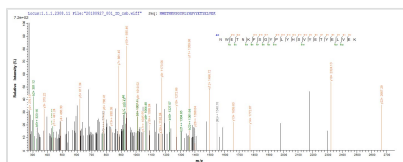
Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-RP117294h could indicate that this peptide derived from E.coli-expressed Homo sapiens (Human) FOLH1.



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Description

Our recombinant human FOLH1 protein is expressed in an E.coli system, providing a partial-length protein that contains the 48-750aa region. This protein features an N-terminal 6xHis-tag, facilitating easy purification and detection in your experiments. With a purity greater than 90% as determined by SDS-PAGE, this recombinant FOLH1 protein offers reliability and consistency for your research needs. Available in liquid or lyophilized powder forms, you can select the format that best meets your laboratory requirements.

FOLH1, also called GCP2, is a type II transmembrane protein that plays a crucial role in the central nervous system and prostate tissue. FOLH1 exhibits folate hydrolase and NAALAdase activity, which is essential for the hydrolysis of N-acetyl-aspartyl-glutamate (NAAG) into glutamate and N-acetyl-aspartate (NAA) [1][2]. The protein's enzymatic activity is vital for regulating excitatory neurotransmission, as it modulates the levels of glutamate, a key neurotransmitter involved in synaptic plasticity and cognitive functions [3].



Moreover, variations in the FOLH1 gene have been linked to metabolic disorders, such as hyperhomocysteinemia, which is associated with neural tube defects and other developmental issues [5]. Notably, FOLH1 is overexpressed in various cancers, particularly prostate cancer, making it a target for therapeutic interventions and imaging techniques [4][6][7].

References:

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Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.