

ARG70501 Mouse GCPII / PSMA recombinant protein (His-tagged)

Package: 100 µg

Store at: -20°C

Summary

Product Description	CHO expressed, His-tagged Mouse GCPII / PSMA recombinant protein.
Tested Application	SDS-PAGE
Target Name	GCPII / PSMA
Species	Mouse
A.A. Sequence	Ile44-Ala752
Expression System	CHO
Alternate Names	FOLH1; Folate Hydrolase 1; NAALAD1; GCPII; PSMA; PSM; Glutamate Carboxypeptidase 2; GCP2; FOLH; N-Acetylated-Alpha-Linked Acidic Dipeptidase I; Pteroylpoly-Gamma-Glutamate Carboxypeptidase; Folylpoly-Gamma-Glutamate Carboxypeptidase; Cell Growth-Inhibiting Gene 27 Protein; Membrane Glutamate Carboxypeptidase; Glutamate Carboxypeptidase II; Glutamate Carboxylase II; EC 3.4.17.21; NAALADase I ; NAALAdase; FGCP; MGCP; Folate Hydrolase (Prostate-Specific Membrane Antigen) 1; N-Acetylated Alpha-Linked Acidic Dipeptidase 1 ; Prostate-Specific Membrane Antigen

Properties

Form	Powder
Purification	>95% (by SDS-PAGE)
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	FOLH1
Gene Full Name	Folate Hydrolase 1
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.
[provided by RefSeq, Jul 2010]

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-aceylaspartyglutamate (NAAG), thereby releasing glutamate. Involved in prostate tumor progression. [Uniprot]