Human PSMA / FOLH1 Protein (His Tag), Biotinylated

Catalog Number: **15877-H07H-B**

General Information

Gene Name Synonym:

FGCP; FOLH; GCP2; GCPII; mGCP; NAALAD1; NAALAdase; PSM; PSMA

Protein Construction:

A DNA sequence encoding the human FOLH1 (NP_004467.1) (Lys44-Ala750) was expressed with a polyhistidine tag at the N-terminus. The purified protein was biotinylated in vitro.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE.

Endotoxin:

< 1.0 EU per μg protein as determined by the LAL method.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: His

Molecular Mass:

The recombinant human FOLH1 consists of 715 amino acids and predicts a molecular mass of 80.5 kDa.

Formulation:

Lyophilized from sterile PBS, pH 7.4.

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

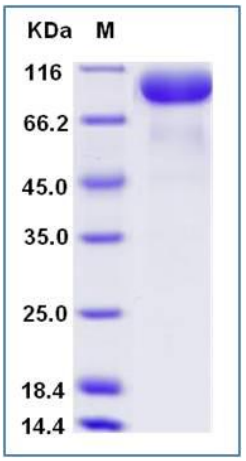
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Glutamate carboxypeptidase 2, also known as Glutamate carboxypeptidase II, Membrane glutamate carboxypeptidase, Prostate-specific membrane antigen, GCPII, PSMA, FOLH1, and NAALAD1, is a single-pass type II membrane protein which belongs to thepeptidase M28 family and M28B subfamily. FOLH1 is highly expressed in prostate epithelium. It is detected in urinary bladder, kidney, testis, ovary, fallopian tube, breast, adrenal gland, liver, esophagus, stomach, small intestine, colon, brain (at protein level), and the capillary endothelium of a variety of tumors. FOLH1 has both folate hydrolase and N-acetylated alpha linked acidic dipeptidase (NAALADase) activity. It has a preference for tri-alpha-glutamate peptides. Genetic variation in FOLH1 may be associated with low folate levels and consequent hyperhomocysteinemia. This condition can result in increased risk of cardiovascular disease, neural tube defects, and cognitive deficits. FOLH1 also shows a promising role in directed imaging and therapy of recurrent or metastatic disease.

References

1.Israeli R.S., *et al.*,(1993), Molecular cloning of a complementary DNA encoding a prostate-specific membrane antigen. Cancer Res. 53:227-230. 2.Su S.L., *et al.*, (1995), Alternatively spliced variants of prostate-specific membrane antigen RNA: ratio of expression as a potential measurement of progression.Cancer Res. 55:1441-1443. 3.O'Keefe D.S., *et al.*,(1998), Mapping, genomic organization and promoter analysis of the human prostate-specific membrane antigen gene.Biochim. Biophys. Acta 1443:113-127.