

Product datasheet for **AM03114PU-N**

PSMA (FOLH1) (44-750) Mouse Monoclonal Antibody [Clone ID: GCP-05]

Product data:

Product Type:	Primary Antibodies
Clone Name:	GCP-05
Applications:	FC, IF, IP
Recommended Dilution:	Flow Cytometry: 6 µg/ml. Immunoprecipitation. Immunocytochemistry.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Amino acids 44-750 of Human PSMA/GCPII
Specificity:	The antibody recognizes extracellular domain of Glutamate Carboxypeptidase II (NAALADase, FOLH1, PSMA), an approximately 95-110 kDa transmembrane glycoprotein expressed mainly in tumour neovasculatures, nervous system and jejunum, which is an important prostate tumour marker.
Formulation:	Phosphate buffered saline (PBS), pH~7.4 State: Purified State: Liquid purified IgG fraction (>95% pure by SDS-PAGE) Preservative: 15 mM Sodium Azide
Concentration:	lot specific
Purification:	Protein A Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C. DO NOT FREEZE!
Stability:	Shelf life: one year from despatch.
Gene Name:	folate hydrolase (prostate-specific membrane antigen) 1
Database Link:	Entrez Gene 2346 Human Q04609



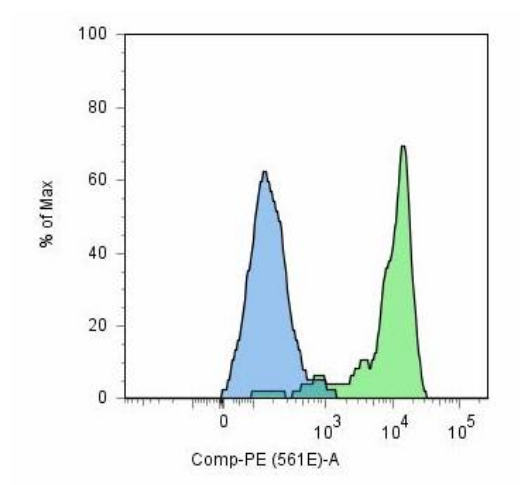
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Background:

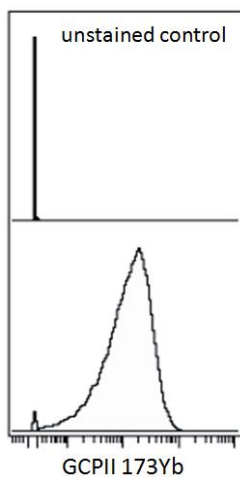
Glutamate Carboxypeptidase II (GCP II), also known as N-acetyl-a-linked acidic dipeptidase I (NAALADase I), folate hydrolase (FOLH1), and prostate-specific membrane antigen (PSMA), is an approximately 95-110 kDa type II transmembrane glycoprotein expressed in various tissues. In nervous system GCP II cleaves abundant N-acetylaspartylglutamate, which is released from neurons in a calcium-dependent manner, to N-acetylaspartate and glutamate. As immoderate glutamate concentration is neurotoxic, GCP II contributes to pathological conditions regarding e.g. Alzheimer's disease, Huntington's disease, epilepsy, schizophrenia, stroke or neuropathic pain and appears to be an interesting therapeutic target. In jejunum GCP II hydrolyzes pteroylpoly-g-glutamate to folate and glutamate, enabling folate to be absorbed by gastrointestinal tract. GCP II, which is present in a number of tissues at low levels, is overexpressed in neovasculature of most solid tumours and is a target enzyme for diagnosis and treatment of prostate cancer. Normal human prostate express more mRNA coding for a cytosolic GCP II form truncated at the N-terminus (PSM') than mRNA for membrane-bound GCP II, and this ratio is reversed upon malignant transformation.

Synonyms:

Glutamate carboxypeptidase 2, Folate hydrolase 1, Prostate-specific membrane antigen, FOLH, NAALAD1, PSM, GCP2, NAALADase

Product images:

Surface staining (flow cytometry) of GCP II / PSMA using anti-GCP II (GCP-05) and goat anti-mouse-PE on LNCaP cell line (positive, green) and HeLa cells (negative, blue).



Surface staining (mass cytometry) of LNCaP cell line using anti-GCPII (GCP-05) 173Yb. Gated on singlets.