

Product datasheet for **AM03114RP-N**

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

Product data:

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|-----------------------|---|
| Product Type: | Primary Antibodies |
| Clone Name: | GCP-05 |
| Applications: | FC |
| Recommended Dilution: | Flow Cytometry: 1/200. |
| Reactivity: | Human |
| Host: | Mouse |
| Isotype: | IgG1 |
| Clonality: | Monoclonal |
| Immunogen: | Amino acids 44-750 of Human PSMA / FOLH1 |
| Specificity: | This 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) Label: PE State: Liquid purified Ig fraction Preservative: 15 mM Sodium Azide Label: Conjugated with R-Phycoerythrin under optimum conditions. |
| Concentration: | lot specific |
| Purification: | Size-Exclusion Chromatography |
| Conjugation: | PE |
| Storage: | Store undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. |
| 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:

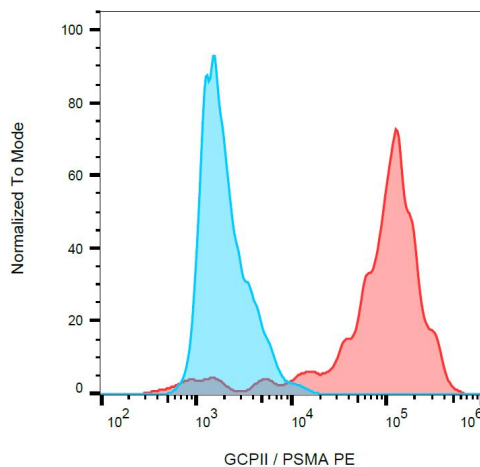
Glutamate carboxypeptidase II (GCPII), also known as N-acetyl-alpha-linked acidic dipeptidase I (NAALADase I), folate hydrolase (FOLH1), and prostate-specific membrane antigen (PSMA), is an approximately 95-110 kDa type II transmembrane glycoprotein expressed in various tissues. In nervous system GCPII 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, GCPII 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 GCPII hydrolyzes pteroylpoly-gamma-glutamate to folate and glutamate, enabling folate to be absorbed by gastrointestinal tract. GCPII, 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 GCPII form truncated at the N-terminus (PSM') than mRNA for membrane-bound GCPII, and this ratio is reversed upon malignant transformation.

Synonyms:

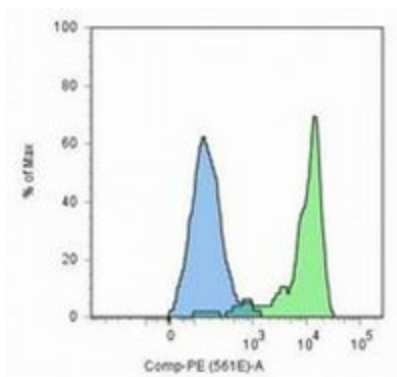
Glutamate carboxypeptidase 2, Folate hydrolase 1, Prostate-specific membrane antigen, FOLH, NAALAD1, PSM, GCP2, NAALADase

Protein Families:

Druggable Genome, Protease, Transmembrane

Product images:

Surface staining (flow cytometry) of GCPII / PSMA using anti-GCPII (GCP-05) PE on LNCaP cell line.



Flow cytometry analysis of GCPII (PSMA) using anti-GCPII (GCP-05) and goat anti-mouse-PE on LNCaP cell line (positive, green) and HeLa cells (negative, blue).