

TECHNICAL DATA SHEET

CyFlow™ GCPII PE Anti-Hu; Clone GCP-05

REF BR339703

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	GCPII
Alternative Names	PSMA
Clone	GCP-05
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [0.1 mg/ml]
Immunogen	Amino acids 44-750 of human GCPII

Specificity

The mouse monoclonal antibody GCP-05 recognizes extracellular domain (preferentially in native form) of GCPII (PSMA), a 95-110 kDa transmembrane glycoprotein expressed mainly in tumor neovasculatures, nervous system and jejunum, which is an important prostate tumour marker.

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Application

The reagent is designed for Flow Cytometry analysis. Suggested working usage is 0.5 µg/ml. Indicated dilution is recommended starting point for use of this product, but working concentrations should be validated by the investigator.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

Glutamate carboxypeptidase II (GCPII), also known as N-acetyl- α -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- γ -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 tumors 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.

References

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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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