

30-1376: Anti-GCPII / PSMA Monoclonal Antibody (Clone:GCP-05)

Clonality :	Monoclonal
Clone Name :	GCP-05
Application :	FACS
Reactivity :	Human
Gene :	FOLH1
Gene ID :	2346
Uniprot ID :	Q04609
Format :	Purified
Alternative Name :	FOLH1,FOLH,NAALAD1,PSM,PSMA,GIG27
Isotype :	Mouse IgG1
Immunogen Information :	amino acids 44-750 of human GCPII

Description

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 (PSMA') than mRNA for membrane-bound GCPII, and this ratio is reversed upon malignant transformation.

Product Info

Amount :	0.1 mg
Purification :	Purified by protein-A affinity chromatography
Storage condition :	Store at 2-8°C. Do not freeze.

Application Note

Flow Cytometry Recommended dilution: 6 µg/ml

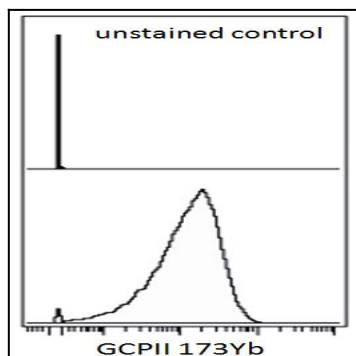


Figure 1: Surface staining (mass cytometry) of LNCaP cell line using anti-GCPII (GCP-05) 173Yb. Gated on singlets.

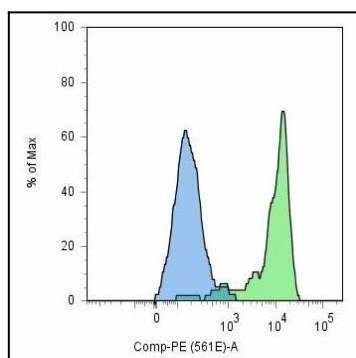


Figure 2: Flow cytometry analysis (surface staining) of GCPII / PSMA using anti-GCPII (GCP-05) and goat anti-mouse-PE on LNCaP cell line (positive, green) and HeLa cells (negative, blue).