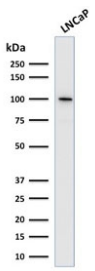
Folate Hydrolase 1 Antibody / Folate Metabolism Marker [clone SPM500] (V7739)

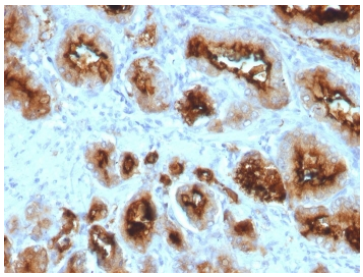
Catalog No.	Formulation	Size
V7739-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7739-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7739SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

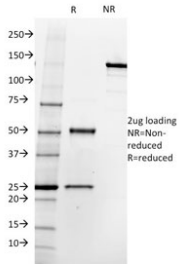
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	SPM500
Purity	Protein G affinity chromatography
UniProt	Q04609
Localization	Cytoplasmic, cell surface
Applications	Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Folate Hydrolase 1 Antibody / Folate Metabolism Marker is available for research use only.



Folate Hydrolase 1 Antibody LNCaP WB. Western blot analysis of human LNCaP cell lysate using Folate Hydrolase 1 Antibody / Folate Metabolism Marker. A strong band is detected at approximately 100 kDa, consistent with the predicted molecular weight of Folate hydrolase 1 / FOLH1, also known as Prostate-specific membrane antigen / PSMA. The observed signal is consistent with established FOLH1 expression in prostate-derived tumor cell models and supports its role as a membrane-associated metallopeptidase involved in folate metabolism and prostate cancer-associated signaling pathways.



Folate Hydrolase 1 Antibody Prostate Cancer IHC. Immunohistochemistry analysis of FFPE human prostate carcinoma tissue stained with Folate Hydrolase 1 Antibody / Folate Metabolism Marker. Malignant glandular epithelial cells demonstrate strong membranous and apical cytoplasmic HRP-DAB brown staining consistent with expression of Folate hydrolase 1 / FOLH1, also known as Prostate-specific membrane antigen / PSMA, a membrane-associated metallopeptidase involved in folate metabolism and prostate tumor-associated signaling pathways. Required HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Folate Hydrolase 1 antibody as confirmation of integrity and purity.

Description

Folate hydrolase 1 (FOLH1), also known as Prostate-specific membrane antigen (PSMA), Glutamate carboxypeptidase II (GCPII), and NAALADase, is a membrane-associated metallopeptidase involved in folate processing and glutamatergic signaling pathways. Folate Hydrolase 1 Antibody / Folate Metabolism Marker is useful for studying membrane-associated enzymatic signaling, folate metabolism, and epithelial differentiation pathways associated with prostate biology and cancer progression. Folate Hydrolase 1 antibody, also referred to as FOLH1 antibody and PSMA antibody in the literature, recognizes a type II transmembrane glycoprotein highly expressed in prostate epithelial tissues and prostate carcinoma cells.

FOLH1 is predominantly localized to the plasma membrane and apical epithelial surfaces where it catalyzes hydrolysis of folate polyglutamates and neuropeptide substrates involved in nutrient metabolism and glutamate signaling. Expression is observed in prostate epithelium, kidney proximal tubules, small intestine, salivary gland, and selected neural tissues. Because FOLH1 functions in both nutrient metabolism and cellular signaling, this target remains relevant to studies examining epithelial physiology, membrane-associated enzyme activity, and tissue-specific metabolic regulation.

Within cancer biology, FOLH1 has become highly important as a prostate-associated membrane marker frequently overexpressed in prostate carcinoma and metastatic disease. Increased expression has been associated with aggressive tumor behavior, androgen-independent progression, and tumor-associated neovasculature. In addition to prostate pathology, FOLH1-associated signaling pathways have been investigated in glutamatergic neurotransmission, folate utilization, and inflammatory microenvironment biology linked to cellular metabolic adaptation.

Because Folate hydrolase 1 demonstrates strong membrane-associated expression patterns in epithelial tissues, this target is useful for studies examining membrane protein localization, epithelial differentiation, and prostate-associated tumor phenotypes. Immunohistochemistry studies commonly demonstrate membranous and apical staining patterns consistent with cell-surface localization of FOLH1-associated glycoprotein complexes. The protein also remains relevant to studies focused on targeted imaging, membrane signaling, and nutrient-responsive metabolic pathways.

A mouse monoclonal clone SPM500 antibody can be used for studies examining folate metabolism-associated signaling and epithelial membrane protein expression pathways. Because FOLH1 functions as both a membrane-associated enzyme and prostate-associated epithelial marker, this target remains highly relevant for studies focused on prostate cancer biology, glutamate signaling, folate metabolism, and epithelial differentiation research.

Researchers studying prostate cancer biology, PSMA-associated signaling, and folate metabolism pathways may also be interested in our FOLH1 Antibody / Prostate Cancer and PSMA Marker page featuring validated immunohistochemistry,

western blot, and protein microarray specificity data for prostate cancer research.

Application Notes

Optimal dilution of the Folate Hydrolase 1 Antibody / Folate Metabolism Marker should be determined by the researcher.

Immunogen

A portion of amino acids 232-433 from the human protein was used as the immunogen for this Folate Hydrolase 1 antibody.

Storage

Store the Folate Hydrolase 1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

FOLH1 antibody, PSMA antibody, Glutamate carboxypeptidase II antibody, GCPII antibody, NAALADase antibody

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