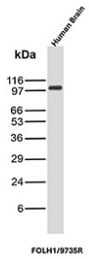
FOLH1 Antibody / Prostate-specific membrane antigen / PMSA [clone FOLH1/9735R] (V5897)

Catalog No.	Formulation	Size
V5897-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5897-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5897SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

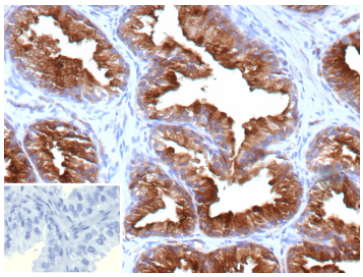
Recombinant RABBIT MONOCLONAL

Bulk quote request

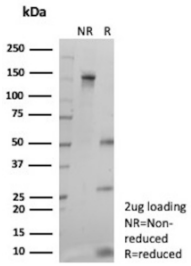
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	FOLH1/9735R
UniProt	Q04609
Localization	Cell membrane, Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This FOLH1/Prostate-specific membrane antigen antibody is available for research use only.



FOLH1 Antibody Brain WB. Western blot analysis of human brain tissue lysate using recombinant FOLH1/Prostate-specific membrane antigen antibody (clone FOLH1/9735R). Predicted molecular weight ~100 kDa.



Immunohistochemistry of PSMA in human prostate tissue. Formalin-fixed, paraffin-embedded human prostate tissue stained with recombinant FOLH1/Prostate-specific membrane antigen antibody (FOLH1/9735R). Brown chromogenic signal indicates PSMA-positive epithelial cells with cytoplasmic and membranous staining. Inset shows PBS substituted for the primary antibody as a secondary-only negative control. Heat-induced epitope retrieval was performed by heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95oC followed by cooling at room temperature for 20 min.



SDS-PAGE Analysis of purified recombinant FOLH1/Prostate-specific membrane antigen antibody (clone FOLH1/9735R). Confirmation of Purity and Integrity of Antibody.

Description

FOLH1 antibody recognizes Prostate-specific membrane antigen, a type II transmembrane glycoprotein also widely known as PSMA, glutamate carboxypeptidase II, NAALADase I, and folate hydrolase 1. Prostate-specific membrane antigen is encoded by the FOLH1 gene and is primarily localized to the cell membrane with an extracellular catalytic domain, although cytoplasmic and intracellular vesicular staining has also been described depending on cellular context. FOLH1 antibody is commonly used in research settings to examine PSMA expression patterns in prostate-derived tissues and other PSMA-expressing cell types. The protein functions as a zinc-dependent metallopeptidase involved in folate metabolism and glutamate signaling through its enzymatic activity on polyglutamated folates and N-acetylaspartylglutamate.

Prostate-specific membrane antigen is highly expressed in normal prostate epithelium and shows markedly increased expression in prostate carcinoma, including primary tumors and metastatic lesions. In addition to prostate tissue, PSMA expression has been reported in the neovasculature of a variety of solid tumors, while most normal non-prostatic tissues exhibit low or absent expression. Because of this restricted and disease-associated expression profile, FOLH1 antibody is frequently applied in studies of prostate cancer biology, tumor progression, and cancer-associated angiogenesis. PSMA expression levels have been correlated with tumor grade, disease stage, and therapeutic response, making it an important research marker in oncologic investigations.

Beyond oncology, Prostate-specific membrane antigen has physiological roles in other tissues. In the nervous system, PSMA is identical to NAALADase I and participates in glutamatergic neurotransmission by hydrolyzing N-acetylaspartylglutamate. In the small intestine, folate hydrolase 1 contributes to dietary folate absorption by cleaving polyglutamated folates. These diverse functional roles highlight the biological significance of FOLH1 across multiple organ systems. FOLH1 antibody enables investigation of PSMA expression and localization in these varied research contexts, supporting studies in cancer, neurobiology, and metabolic regulation. Clone FOLH1/9735R is designed to recognize Prostate-specific membrane antigen and can be used to study PSMA distribution and expression patterns in relevant research applications.

FOLH1 antibody provides a valuable tool for examining Prostate-specific membrane antigen biology, including its membrane-associated localization, enzymatic activity, and disease-linked expression changes. Its use supports detailed characterization of PSMA in experimental models, tissue-based studies, and translational research focused on prostate cancer and related fields.

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 FOLH1/Prostate-specific membrane antigen antibody should be determined by the researcher.

Immunogen

Recombinant human FOLH1 protein fragment (around amino acids 1-200) (exact sequence is proprietary) was used as the immunogen for the FOLH1/Prostate-specific membrane antigen antibody.

Storage

FOLH1/Prostate-specific membrane antigen antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.