

Rabbit anti-Human PSMA Monoclonal Antibody | anti-PSMA antibody

Anti-PSMA Rabbit Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA47122	Rabbit	Human	Western Blot, Immunohistochemistry, Immunoprecipitation

PRODUCT SYNONYMS

PSMA; Monoclonal Antibody; Anti-PSMA Rabbit Monoclonal Antibody; Glutamate carboxypeptidase 2; 3.4.17.21; Cell growth-inhibiting gene 27 protein; Folate hydrolase 1; Folylpoly-gamma-glutamate carboxypeptidase; FGCP; Glutamate carboxypeptidase II; GCPII; Membrane glutamate carboxypeptidase; mGCP; N-acetylated-alpha-linked acidic dipeptidase I; NAALADase I; Prostate-specific membrane antigen; PSM; Pteroylpoly-gamma-glutamate carboxypeptidase; FOLH1; FOLH; NAALAD1; GIG27; anti-PSMA antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Purity/Purification	Affinity-chromatography
Form/Format	Liquid
Sequence Length	442
Applicable Applications for anti-PSMA antibody	WB (Western Blot), IHC (Immunohistochemistry), IP (Immunoprecipitation)
Immunogen	A synthesized peptide derived from human PSMA
Subcellular Localization	Cell membrane; Single-pass type II membrane protein.
Tissue Specificity	Highly expressed in prostate epithelium. Detected in urinary bladder, kidney, testis, ovary, fallopian tube, breast, adrenal gland, liver, esophagus, stomach, small intestine, colon and brain (at protein level). Detected in the small intestine, brain, kidney, liver, spleen, colon, trachea, spinal cord and the capillary endothelium of a variety of tumors. Expressed specifically in jejunum brush border membranes. In the brain, highly expressed in the ventral striatum and brain stem. Also expressed in fetal liver and kidney. Isoform PSMA' is the most abundant form in normal prostate. Isoform PSMA-1 is the most abundant form in primary prostate tumors. Isoform PSMA-3 is also found in normal prostate as well as in brain and liver. Isoform PSMA-9 is specifically expressed in prostate cancer.
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded human prostate carcinoma, using PSMA Antibody(AAA47122)FOLH1 was detected in paraffin-embedded tissue section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-FOLH1 Antibody (AAA47122)overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)
Western blot analysis of PSMA expression in LnCaP cell lysate (AAA47122).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-FOLH1 monoclonal antibody overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for FOLH1.

ADDITIONAL INFORMATION

Related Product Information for anti-PSMA antibody	Has both folate hydrolase and N-acetylated-alpha-linked- acidic dipeptidase (NAALADase) activity. Has a preference for tri- alpha-glutamate peptides. In the intestine, required for the uptake of folate. In the brain, modulates excitatory neurotransmission through the hydrolysis of the neuropeptide, N- aceylaspartylglutamate (NAAG), thereby releasing glutamate. Involved in prostate tumor progression.
Product Categories/Family for anti-PSMA antibody	Signal Transduction; Metabolism; Amino Acids; Cancer; Tumor Biomarkers; Metabolism; Pathways and Processes; Metabolic Signaling Pathways; Amino Acid Metabolism; Types of Disease

NCBI AND UNIPROT INFORMATION

NCBI GI #	62548858
NCBI GeneID	2346
NCBI Accession #	NP_001014986.1
NCBI GenBank Nucleotide #	NM_001014986.2
UniProt Accession #	Q04609; O43748; Q16305; Q541A4; Q8TAY3; Q9NP15; A4UU12; A9CB79; B7Z312; B7Z343; D3DQS5; E9PDX8
Molecular Weight	84331 MW
NCBI Official Full Name	glutamate carboxypeptidase 2 isoform 2
NCBI Official Synonym Full Names	folate hydrolase 1
NCBI Official Symbol	FOLH1
NCBI Official Synonym Symbols	PSM; FGCP; FOLH; GCP2; PSMA; mGCP; GCPII; NAALAD1; NAALAdase
NCBI Protein Information	glutamate carboxypeptidase 2
UniProt Protein Name	Glutamate carboxypeptidase 2
UniProt Gene Name	FOLH1
UniProt Synonym Gene Names	FOLH; NAALAD1; PSM; PSMA; FGCP; GCPII; mGCP; NAALADase I; PSM; PSMA

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.