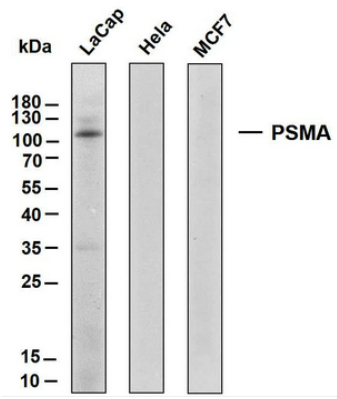
Prostate-Specific Membrane Antigen (PSMA) (ABT-PSMA) mouse mAb

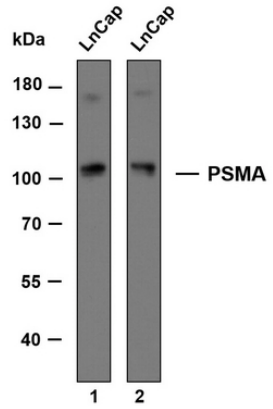
Catalog No	BYab-15296
Isotype	IgG
Reactivity	Human; Predict react with Mouse, Rat
Applications	IHC,WB
Gene Name	FOLH1 FOLH NAALAD1 PSM PSMA GIG27
Protein Name	Glutamate carboxypeptidase 2 (EC 3.4.17.21) (Cell growth-inhibiting gene 27 protein) (Folate hydrolase 1) (Folylpoly-gamma-glutamate carboxypeptidase) (FGCP) (Glutamate carboxypeptidase II) (GCPII) (M
Immunogen	Synthesized peptide derived from human Prostate-Specific Membrane Antigen (PSMA)
Specificity	This antibody detects endogenous levels of human Prostate-Specific Membrane Antigen (PSMA). Heat-induced epitope retrieval (HIER) Citrate buffer of pH6.0 was highly recommended as antigen repair metho
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Mouse, Monoclonal/IgG1, Kappa
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p 1:100-500，WB 1:500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	
Cell Pathway	Cell membrane ; Single-pass type II membrane protein .; [Isoform PSMA']: Cytoplasm .
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.
Function	alternative products:Experimental confirmation may be lacking for some isoforms,catalytic activity:Release of an unsubstituted, C-terminal glutamyl residue, typically from Ac-Asp-Glu or folylpoly-gamma-glutamates.,cofactor:Binds 2 zinc ions per subunit. Required for NAALADase activity.,domain:The NAALADase activity is found in the central region, the dipeptidyl peptidase IV type activity in the C-terminal.,enzyme regulation:The NAALADase activity is inhibited by beta-NAAG, quisqualic acid, 2-(phosphonomethyl) pentanedioic acid (PMPA) and EDTA. Activated by cobalt.,function:Also exhibits a dipeptidyl-peptidase IV type activity. In vitro, cleaves Gly-Pro-AMC.,function: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
Background	This gene encodes a type II transmembrane glycoprotein belonging to the M28 peptidase family. The protein acts as a glutamate carboxypeptidase on different alternative substrates, including the nutrient folate and the neuropeptide N-acetyl-l-aspartyl-l-glutamate and is expressed in a number of tissues such as prostate, central and peripheral nervous system and kidney. A mutation in this gene may be associated with impaired intestinal absorption of dietary folates, resulting in low blood folate levels and consequent hyperhomocysteinemia. Expression of this protein in the brain may be involved in a number of pathological conditions associated with glutamate excitotoxicity. In the prostate the protein is up-regulated in cancerous cells and is used as an effective diagnostic and prognostic indicator of prostate cancer. This gene likely arose from a duplication event of a nearby chromosomal region. Alter
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images

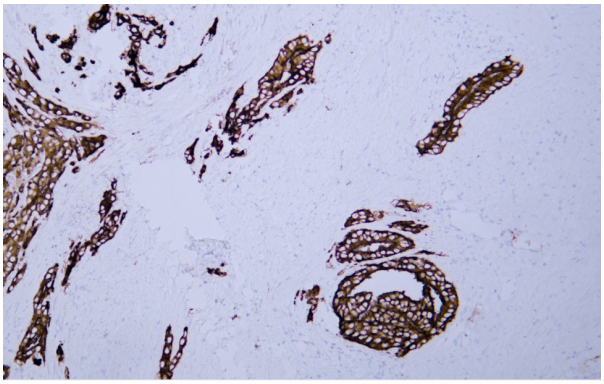


Various whole cell lysates were separated by 12% SDS-PAGE, and the membrane was blotted with anti-PMSA antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody. Predicted band size: 84 kDa Observed band size: 110 kDa



Whole cell lysates of LnCap were separated by 8% SDS-PAGE, and the membrane was blotted with anti-PSMA antibody. The HRP-conjugated anti-Mouse IgG antibody was used to detect the antibody. Lane 1：Anti-PSMA antibody at 1ug/ml Lane 2：Anti-PSMA antibody at 0.2ug/ml Predicted band size: 84 kDa Observed band size: 100 kDa

Human prostate tissue was stained with Anti-Prostate-Specific Membrane Antigen (ABT-PSMA) Antibody



Human prostatic adenocarcinoma tissue was stained with Anti-Prostate-Specific Membrane Antigen (ABT-PSMA) Antibody