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PSMA

Purified Mouse Monoclonal Antibody
Catalog # AO2727a

Product Information

Application	WB, IHC, ICC, E
Primary Accession	Q04609
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2D10E10
Isotype	Mouse IgG1
Calculated MW	84331
Immunogen	Purified recombinant fragment of human PSMA (AA: extra 44-177) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide

Additional Information

Gene ID	2346
Other Names	FOLH1; PSM; FGCP; FOLH; GCP2; mGCP; GCPII; NAALAD1; NAALAdase
Dilution	WB~~ 1/500 - 1/2000 IHC~~1:100~500 ICC~~N/A E~~ 1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PSMA is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FOLH1 (HGNC:3788)
Synonyms	FOLH, NAALAD1, PSM, PSMA
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 excitatory neurotransmission through the hydrolysis of the neuropeptide, N-aceylaspartylglutamate (NAAG), thereby releasing glutamate. Involved in prostate tumor progression.

Cellular Location	Cell membrane; Single-pass type II membrane protein
Tissue Location	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-9 is specifically expressed in prostate cancer

References

1.Med Oncol. 2014 Mar;31(3):857. 2.Int J Oncol. 2014 Mar;44(3):918-22.

Images

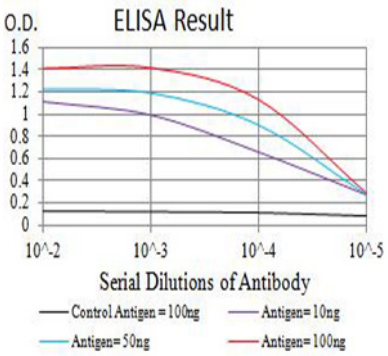

Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)

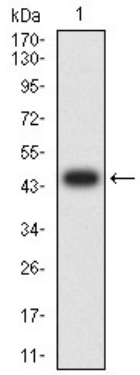

Figure 2:Western blot analysis using PSMA mAb against human PSMA (AA: extra 44-177) recombinant protein. (Expected MW is 47 kDa)

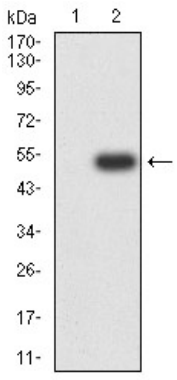

Figure 3:Western blot analysis using PSMA mAb against HEK293 (1) and PSMA (AA: extra 44-177)-hIgGFc transfected HEK293 (2) cell lysate.

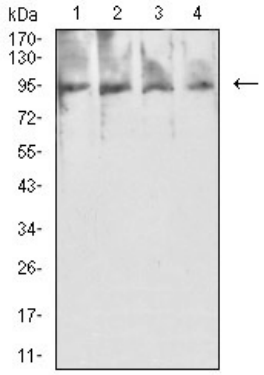

Figure 4:Western blot analysis using PSMA mouse mAb against Hela (1), MCF-7 (2), HCT116 (3), and GC-7901 (4) cell lysate.

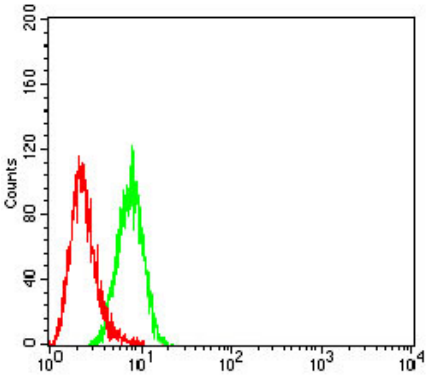

Figure 5:Flow cytometric analysis of Hela cells using PSMA mouse mAb (green) and negative control (red).