

IHCab™ Prostate-Specific Membrane Antigen (PSMA) (BGT-PSMA) mouse mAb

Cat #: B-IMW6214

Size: 100 µL

Storage: Store at -20°C. Avoid repeated freeze / thaw cycles.

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.

Product Information

Applications/Dilution: IHC-p 1:100-500, WB 1:500-2000

Isotype/Source: Mouse, Monoclonal/IgG1, Kappa

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

Subcellular Location: Cell membrane ; Single-pass type II membrane protein .; [Isoform PSMA']: Cytoplasm

Expression: 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.

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Storage: Store at -15°C to -25°C



Fig.1. Human prostate tissue was stained with Anti-Prostate-Specific Membrane Antigen Antibody

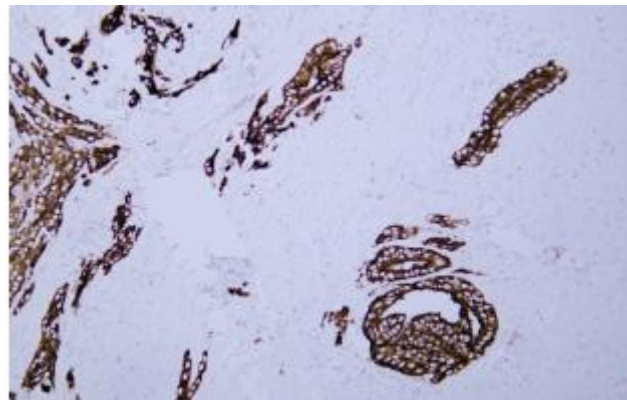


Fig.2. Human prostatic adenocarcinoma tissue was stained with Anti-Prostate-Specific Membrane Antigen Antibody

Note:

The product listed herein is for research use only and is not intended for use in human or clinical diagnosis.