

IHCAb™ Epithelial Membrane Antigen (MUC1) mouse mAb (BGT100)

Cat #: B-IMW6810

Size: 100 µL

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

Background

This gene encodes a membrane-bound protein that is a member of the mucin family. Mucins are O-glycosylated proteins that play an essential role in forming protective mucous barriers on epithelial surfaces. These proteins also play a role in intracellular signaling. This protein is expressed on the apical surface of epithelial cells that line the mucosal surfaces of many different tissues including lung, breast stomach and pancreas. This protein is proteolytically cleaved into alpha and beta subunits that form a heterodimeric complex. The N-terminal alpha subunit functions in cell-adhesion and the C-terminal beta subunit is involved in cell signaling. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas. This gene is known to contain a highly polymorphic variable number tandem repeats (VNTR) domain

Product Information

Applications/Dilution: IHC-p 1:100-500, WB 1:200-1000, IF 1:100-500

Isotype/Source: Mouse, Monoclonal/IgG1, Kappa

Specificity: The antibody can specifically recognize human MUC1 protein. In western blotting of NIH3T3 cell lysate, there shows a 122KDa band detected by the antibody.

Subcellular Location: Apical cell membrane ; Single-pass type I membrane protein . Exclusively located in the apical domain of the plasma membrane of highly polarized epithelial cells. After endocytosis, internalized and recycled to the cell membrane. Located to microvilli and to the tips of long filopodial protusions.; [Isoform 5]: Secreted.; [Isoform Y]: Secreted.; [Isoform 9]: Secreted.; [Mucin-1 subunit beta]: Cell membrane. Cytoplasm. Nucleus. On EGF and PDGFRB

stimulation, transported to the nucleus through interaction with CTNNB1, a process which is stimulated by phosphorylation. On HRG stimulation, colocalizes with JUP/gamma-catenin at the nucleus.

Expression: Expressed on the apical surface of epithelial cells, especially of airway passages, breast and uterus. Also expressed in activated and unactivated T-cells. Overexpressed in epithelial tumors, such as breast or ovarian cancer and also in non-epithelial tumor cells. Isoform Y is expressed in tumor cells only

Formulation: Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.107% sodium azide

Storage: Store at -15°C to -25°C

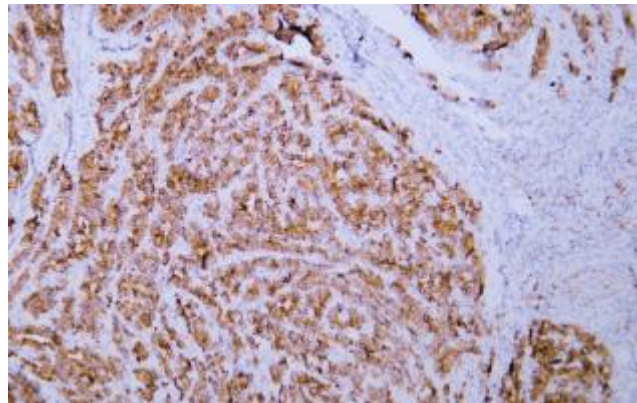


Fig.1. Human gastric adenocarcinoma tissue was stained with Anti-MUC1 Antibody

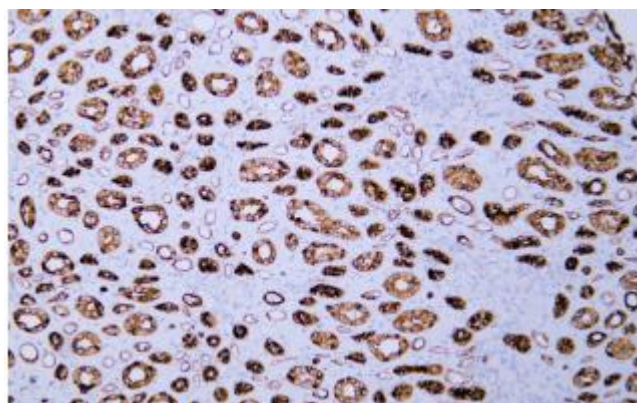


Fig.2. Human kidney tissue was stained with Anti-MUC1 Antibody

Note:

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