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Phospho-MUC1(Y1203) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3614a

Specification

Phospho-MUC1(Y1203) Antibody Blocking peptide - Product Information

Primary Accession P15941

Phospho-MUC1(Y1203) Antibody Blocking peptide - Additional Information

Gene ID 4582

Other Names
Mucin-1, MUC-1, Breast carcinoma-associated antigen DF3, Cancer antigen 15-3, CA 15-3, Carcinoma-associated mucin, Episialin, H23AG, Krebs von den Lungen-6, KL-6, PEMT, Peanut-reactive urinary mucin, PUM, Polymorphic epithelial mucin, PEM, Tumor-associated epithelial membrane antigen, EMA, Tumor-associated mucin, CD227, Mucin-1 subunit alpha, MUC1-NT, MUC1-alpha, Mucin-1 subunit beta, MUC1-beta, MUC1-CT, MUC1, PUM

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP3614a was selected from the Y1203 region of human Phospho-MUC1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-MUC1(Y1203) Antibody Blocking peptide - Protein Information

Name MUC1

Synonyms PUM

Function
The alpha subunit has cell adhesive properties. Can act both as an adhesion and an anti-adhesion protein. May provide a protective layer on epithelial cells against bacterial and enzyme attack.

Cellular Location
Apical cell membrane; Single-pass type I membrane protein. Note=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 Y]: Secreted. [Mucin-1 subunit beta]: Cell membrane. Cytoplasm. Nucleus. Note=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

Tissue Location
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

Phospho-MUC1(Y1203) Antibody Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

Phospho-MUC1(Y1203) Antibody Blocking peptide - Images

Phospho-MUC1(Y1203) Antibody Blocking peptide - Background

MUC1 is a member of the mucin family and a membrane bound, glycosylated phosphoprotein. The protein is anchored to the apical surface of many epithelia by a transmembrane domain, with the degree of glycosylation varying with cell type. It also includes a 20 aa variable number tandem repeat (VNTR) domain, with the number of repeats varying from 20 to 120 in different individuals. The protein serves a protective function by binding to pathogens and also functions in a cell signaling capacity. Overexpression, aberrant intracellular localization, and changes in glycosylation of this protein have been associated with carcinomas.

Phospho-MUC1(Y1203) Antibody Blocking peptide - References

Guo A, et al. (2008) Proc Natl Acad Sci U S A 105, 692-7Rikova K, et al. (2007) Cell 131, 1190-203Kato K, Lu W, Kai H, Kim KC (2007) Am J Physiol Lung Cell Mol Physiol 293, L686-92Singh PK, et al. (2007) Cancer Res 67, 5201-10