

**MUC1-T1224 Antibody Blocking peptide**  
Synthetic peptide  
Catalog # BP10097a**Specification**

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**MUC1-T1224 Antibody Blocking peptide - Product Information**

Primary Accession [P15941](#)  
Other Accession [NP\\_001037856.1](#), [NP\\_001037858.1](#),  
[NP\\_002447.4](#), [NP\\_001037855.1](#),  
[NP\\_001018016.1](#), [NP\\_001037857.1](#)

**MUC1-T1224 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

**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.

**MUC1-T1224 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

#### **MUC1-T1224 Antibody Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **MUC1-T1224 Antibody Blocking peptide - Images**

#### **MUC1-T1224 Antibody Blocking peptide - Background**

This gene is a member of the mucin family and encodes 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. Multiple alternatively spliced transcript variants that encode different isoforms of this gene have been reported, but the full-length nature of only some has been determined. [provided by RefSeq].

#### **MUC1-T1224 Antibody Blocking peptide - References**

Behrens, M.E., et al. Oncogene 29(42):5667-5677(2010) Lacunza, E., et al. Cancer Genet. Cytogenet. 201(2):102-110(2010) Meyer, T.E., et al. PLoS Genet. 6 (8) (2010) :Beatson, R.E., et al. Immunotherapy 2(3):305-327(2010) Caffery, B., et al. Mol. Vis. 16, 1720-1727 (2010) :