

Datasheet for ABIN7599704
anti-MUC1 antibody (AA 1098-1255)



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Overview

Quantity:	100 µg
Target:	MUC1
Binding Specificity:	AA 1098-1255
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This MUC1 antibody is un-conjugated
Application:	Immunohistochemistry (IHC), ELISA, Flow Cytometry (FACS)

Product Details

Purpose:	Anti-MUC1 Antibody
Immunogen:	E.coli-derived human MUC1 recombinant protein (Position: S1098-L1255).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-MUC1 Antibody Picoband® (ABIN7599704). Tested in ELISA, Flow Cytometry, IHC applications. This antibody reacts with Human.
Purification:	Immunogen affinity purified.

Target Details

Target:	MUC1
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Target Details

Alternative Name: MUC1 ([MUC1 Products](#))

Background: Synonyms: 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

Tissue Specificity: 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.

Background: Mucin 1, cell surface associated (MUC1) or polymorphic epithelial mucin (PEM) is a mucin encoded by the MUC1 gene in humans. 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. It is mapped to 1q22. Mucin 1 is a transmembrane mucin normally expressed on the apical borders of secretory epithelial cells. Overexpression of Mucin 1 is often associated with colon, breast, ovarian, lung and pancreatic cancers. The protein serves a protective function by binding to pathogens and also functions in a cell signaling capacity. Mucin 1 stimulated ESR1-mediated transcription and contributed to estradiol-mediated growth and survival of breast cancer cells. This gene also can suppress pulmonary innate immunity, and its antiinflammatory activity may play an important modulatory role during microbial infection.

Molecular Weight: 122 kDa

Gene ID: 4582

UniProt: [P15941](#)

Pathways: [Negative Regulation of intrinsic apoptotic Signaling](#)

Application Details

Application Notes: Immunohistochemistry(Paraffin-embedded Section), 2-5 µg/mL, Human

Flow Cytometry (Fixed), 1-3 µg/1x10⁶ cells, Human

ELISA, 0.1-0.5 µg/mL, -

1. Gendler SJ, Lancaster CA, Taylor-Papadimitriou J, Duhig T, Peat N, Burchell J, Pemberton L, Lalani EN, Wilson D (September 1990). "Molecular cloning and expression of human tumor-associated polymorphic epithelial mucin". J. Biol. Chem. 265 (25): 15286-93. 2. Wei, X., Xu, H.,

Application Details

Kufe, D. MUC1 oncoprotein stabilizes and activates estrogen receptor alpha. *Molec. Cell* 21: 295-305, 2006. 3. Lu, W., Hisatsune, A., Koga, T., Kato, K., Kuwahara, I., Lillehoj, E. P., Chen, W., Cross, A. S., Gendler, S. J., Gewirtz, A. T., Kim, K. C. Cutting edge: enhanced pulmonary clearance of *Pseudomonas aeruginosa* by Muc1 knockout mice. *J. Immun.* 176: 3890-3894, 2006.

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Concentration: 500 µg/mL

Buffer: Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na₂HPO₄.

Storage: 4 °C, -20 °C

Storage Comment: At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month.
It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.