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MUC1 Rabbit mAb

Catalog # AP75753

Product Information

Application	WB, IHC-P, FC, IP
Primary Accession	P15941
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	122102

Additional Information

Gene ID	4582
Other Names	MUC1
Dilution	WB~~1:500-1:1000 IHC-P~~N/A FC~~1:20 IP~~1:20
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

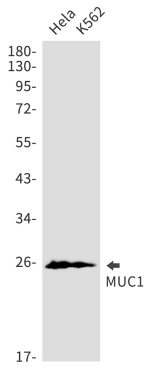
Name	MUC1
Synonyms	PUM
Function	The alpha subunit has cell adhesive properties. Can act both as an adhesion and an anti-adhesion protein. May provide a protective layer on epithelial cells against bacterial and enzyme attack.
Cellular Location	Apical cell membrane; Single-pass type I membrane protein. 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

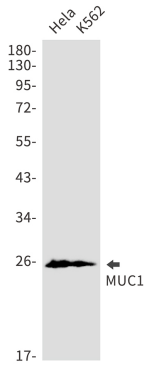
Background

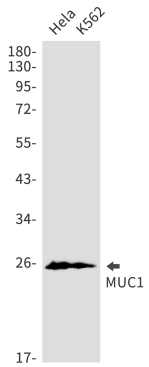
MUC1 is a type I transmembrane glycoprotein expressed by various epithelial cells of the female reproductive tract, lung, breast, kidney, stomach, and pancreas. MUC1 is transcribed as a large precursor gene product, and upon translation, is cleaved in the endoplasmic reticulum, yielding two subunits: the large extracellular N-terminal subunit (MUC1-N, about 120-200 kDa) and the small cytoplasmic C-terminal subunit (MUC1-C, about 23-30 kDa). Among the known mucins, MUC1 is best studied and plays crucial roles in regulating many cellular properties, including cell proliferation, apoptosis, adhesion, and invasion. MUC1 is overexpressed in a wide range of human epithelial malignancies.

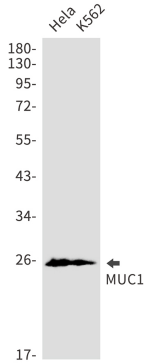
Images



Western blot analysis of MUC1 in Hela, K562 lysates using Mucin 1 antibody.







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