



Mucin 1 (phospho Ser1227) Polyclonal Antibody

Catalog No	YP-Ab-16910
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	IHC;IF;ELISA
Gene Name	MUC1
Immunogen	The antiserum was produced against synthesized peptide derived from human MUC1 around the phosphorylation site of Ser1227. AA range:1196-1245
Specificity	Phospho-Mucin 1 (S1227) Polyclonal Antibody detects endogenous levels of Mucin 1 protein only when phosphorylated at S1227.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/5000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CA153;CA15-3;MUC1;Breast carcinoma-associated antigen DF3;CA 15-3;Mucin 1;Mucin-1 (MUC-1) (Breast carcinoma-associated antigen DF3) (Carcinoma-associated mucin) (Episialin) (H23AG) (Krebs von den Lungen-6) (KL-6) (PEMT) (Peanut-reactive urinary mucin) (PUM) (Polymorphic epi;PUM;Mucin-1;MUC-1; Carcinoma-associated mucin;Episialin;H23AG;Krebs von den Lungen-6;KL-6; PEMT;Peanut-reactive urinary mucin;Polymorphic epithelial mucin;PEM;Tumor-associated ep
Observed Band	
Calculated Molecular Weight	
Cell Pathway	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.



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.

Function

alternative products: Additional isoforms seem to exist, caution: O-glycosylation sites are annotated in first sequence repeat only. Residues at similar position are probably glycosylated in all repeats. Experimental sites were determined in a synthetic peptide glycosylated in vitro (PubMed:7744025, PubMed:9597769)., caution: The N-terminal sequence has been shown (PubMed:11341784) to begin at position 24 or 28., developmental stage: During fetal development, expressed at low levels in the colonic epithelium from 13 weeks of gestation., 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., function: The beta subunit contains a C-terminal domain which is involved in cell signaling, through phosphorylations and protein-protein interactions. Modulates s

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. Alternate sp

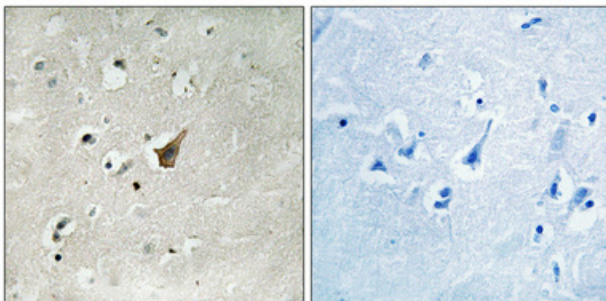
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100 (4° overnight). High-pressure and temperature Tris-EDTA, pH 8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.