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MUC4 Antibody
Rabbit mAb
Catalog # AP91479

Specification

MUC4 Antibody - Product Information

Application	**WB**
Primary Accession	Q99102
Clonality	**Monoclonal**

Other Names
Ascites sialoglycoprotein 1; Ascites sialoglycoprotein 2; Ascites sialoglycoprotein; ASGP; ASGP-1; ASGP-2; Muc4; Mucin 4 cell surface associated; Mucin 4 tracheobronchial; Mucin-4 beta chain; Testis mucin;

Isotype	**Rabbit IgG**
Host	**Rabbit**
Calculated MW	**542307 Da**

MUC4 Antibody - Additional Information

Dilution	**WB~~1:1000**
Purification	**Affinity-chromatography**
Immunogen	**A synthesized peptide derived from human MUC4**
Description	**May play a role in tumor progression. Ability to promote tumor growth may be mainly due to repression of apoptosis as opposed to proliferation.**
Storage Condition and Buffer	**Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

MUC4 Antibody - Protein Information

Name MUC4

Function
Membrane-bound mucin, a family of highly glycosylated proteins that constitute the major component of the mucus, the slimy and viscous secretion covering epithelial surfaces (PubMed:10880978). These glycoproteins play important roles in the protection of the epithelium and are implicated in epithelial renewal and differentiation (PubMed:10880978). Regulates cellular behavior through both anti- adhesive effects on cell-cell and cell-extracellular matrix interactions and its ability to act as an intramembrane ligand for ERBB2. Plays an important role in proliferation and differentiation of epithelial cells by inducing specific phosphorylation of ERBB2. In polarized epithelial cells, segregates ERBB2 and other ERBB receptors and prevents ERBB2 from

acting as a coreceptor. The interaction with ERBB2 leads to enhanced expression of CDKN1B. The formation of a MUC4- ERBB2-ERBB3-NRG1 complex leads to down-regulation of CDKN1B, resulting in repression of apoptosis and stimulation of proliferation. Its ability to promote tumor growth may be mainly due to repression of apoptosis as opposed to proliferation.

Cellular Location

[Mucin-4 beta chain]: Cell membrane; Single-pass membrane protein. Note=Isoforms lacking the Cys-rich region, EGF-like domains and transmembrane region are secreted Secretion occurs by splicing or proteolytic processing [Isoform 3]: Cell membrane; Single-pass membrane protein [Isoform 15]: Secreted

Tissue Location

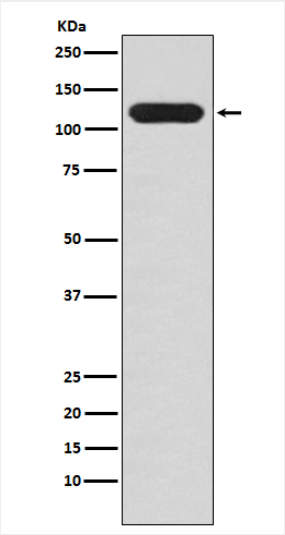
Expressed in the thymus, thyroid, lung, trachea, esophagus, stomach, small intestine, colon, testis, prostate, ovary, uterus, placenta, and mammary and salivary glands. Expressed in carcinomas arising from some of these epithelia, such as lung cancers, squamous cell carcinomas of the upper aerodigestive tract, mammary carcinomas, biliary tract, colon, and cervix cancers. Minimally or not expressed in the normal pancreas or chronic pancreatitis, but is highly expressed in pancreatic tumors and pancreatic tumor cell lines

MUC4 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MUC4 Antibody - Images



Western blot analysis of MUC4 expression in MCF7 cell lysate.