

# Anti-MUC4 Rabbit Monoclonal Antibody

Catalog # ABO15213

#### Specification

# **Anti-MUC4 Rabbit Monoclonal Antibody - Product Information**

Application **WB Primary Accession** 099102 Rabbit Host Isotype laG Reactivity Human Clonality Monoclonal Format Liquid Description Anti-MUC4 Rabbit Monoclonal Antibody . Tested in WB application. This antibody reacts with Human.

## Anti-MUC4 Rabbit Monoclonal Antibody - Additional Information

Gene ID 4585

**Other Names** Mucin-4, MUC-4, Ascites sialoglycoprotein, ASGP, Pancreatic adenocarcinoma mucin, Testis mucin, Tracheobronchial mucin, Mucin-4 alpha chain, Ascites sialoglycoprotein 1, ASGP-1, Mucin-4 beta chain, Ascites sialoglycoprotein 2, ASGP-2, MUC4

Application Details WB 1:500-1:2000

Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human MUC4

**Purification** Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

### Anti-MUC4 Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/10880978" target="\_blank">10880978</a>). These glycoproteins play important roles in the protection of the epithelium and are implicated in epithelial renewal and differentiation (PubMed:<a

href="http://www.uniprot.org/citations/10880978" target="\_blank">10880978</a>). 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

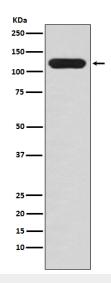
### Anti-MUC4 Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-MUC4 Rabbit Monoclonal Antibody - Images





Western blot analysis of MUC4 expression in MCF7 cell lysate.