

Mucin 4 Rabbit mAb

Catalog # AP75754

Product Information

Application WB 099102 **Primary Accession** Reactivity Human Host Rabbit

Clonality Monoclonal Antibody

Calculated MW 542307

Additional Information

Gene ID 4585

Other Names MUC4

Dilution WB~~1/500-1/1000

Format 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 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

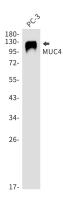
opposed to proliferation.

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

Images



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