

KD-Validated Anti-MUC4 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody

Catalog # AGI1237

Product Information

Application	WB, FC, ICC
Primary Accession	Q99102
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB2595
Calculated MW	542307
Gene Name	MUC4
Aliases	Mucin 4, Cell Surface Associated; Ascites Sialoglycoprotein; MUC-4; ASGP; Pancreatic Adenocarcinoma Mucin; Mucin 4, Tracheobronchial; Tracheobronchial Mucin; Testis Mucin; Mucin-4; HSA276359
Immunogen	A synthesized peptide derived from human MUC4

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

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

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