

Product datasheet

Anti-MUC4 antibody [EPR9308] ab150381

Recombinant RabMAb

★★★★☆ [2 Abreviews](#) [1 References](#) [6 Images](#)

Overview

Product name	Anti-MUC4 antibody [EPR9308]
Description	Rabbit monoclonal [EPR9308] to MUC4
Host species	Rabbit
Tested applications	Suitable for: IHC-P
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human MUC4. The exact sequence is proprietary. Database link: Q99102
Positive control	Human colon tissue
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR9308
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab150381 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P	★ ★ ★ ☆ ☆ (2)	1/750. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. For unpurified use at 1:50 - 1:100.

Target

Function May play a role in tumor progression. Ability to promote tumor growth may be mainly due to repression of apoptosis as opposed to proliferation. Has anti-adhesive properties. Seems to alter cellular behavior through both anti-adhesive effects on cell-cell and cell-extracellular matrix interactions and in its ability to act as an intramembrane ligand for ERBB2. Plays an important role in cell proliferation and differentiation of epithelial cells by inducing specific phosphorylation of ERBB2. The MUC4-ERBB2 complex causes site-specific phosphorylation of the ERBB2 'Tyr-1248'. 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.

Tissue specificity 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.

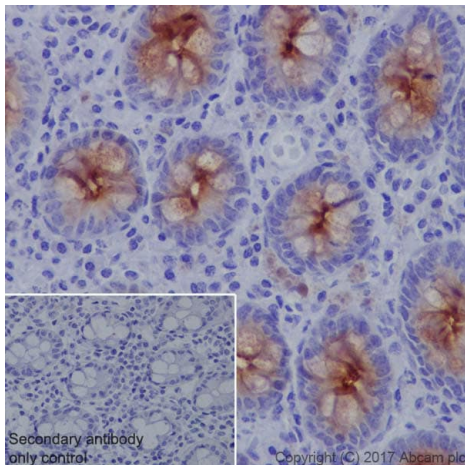
Sequence similarities Contains 1 AMOP domain.
Contains 2 EGF-like domains.
Contains 1 NIDO domain.
Contains 1 VWFD domain.

Developmental stage Expressed early in the primitive gut before respiratory and digestive epithelial cells have acquired their tissue and cell specificity. Expressed at the basal surface of the epithelium from week 14 to 26 weeks and then predominantly localized in only parietal cells. Immediately before birth, found in the cytoplasm of the mucous columnar epithelial cells. In the embryo expressed in skin, then disappears late in gestation.

Post-translational modifications Proteolytically cleaved into 2 chains, mucin-4 alpha chain and mucin-4 beta chain.
mucin-4 alpha chain is highly O-glycosylated.
mucin-4 beta chain is predominantly N-glycosylated.

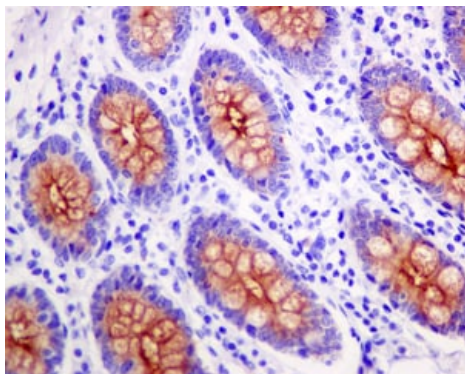
Cellular localization Secreted; Cell membrane and Membrane. Secreted. Isoforms lacking the Cys-rich region, EGF-like domains and transmembrane region are secreted. Secretion occurs by splicing or proteolytic processing.

Images



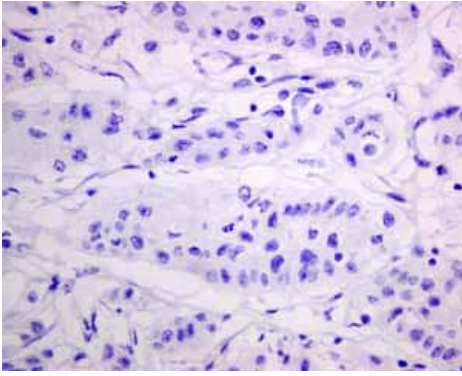
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC4 antibody [EPR9308] (ab150381)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue sections labeling MUC4 with purified ab150381 at 1:750 dilution (1.44 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC4 antibody [EPR9308] (ab150381)

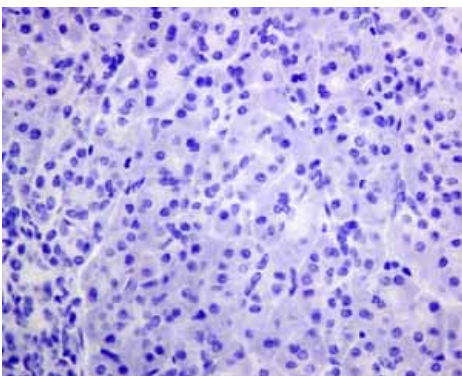
Immunohistochemical analysis of paraffin embedded Human colon tissue labeling MUC4 with unpurified ab150381 at a 1/50 dilution. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC4 antibody [EPR9308] (ab150381)

Immunohistochemical analysis of paraffin embedded Human Stomach adenocarcinoma tissue using unpurified ab150381 showing -ve staining.

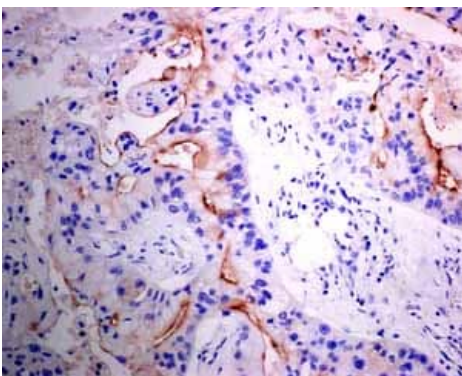
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC4 antibody [EPR9308] (ab150381)

Immunohistochemical analysis of paraffin embedded normal Human pancreas tissue using unpurified ab150381 showing -ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC4 antibody [EPR9308] (ab150381)

Immunohistochemical analysis of paraffin embedded Human Pancreatic carcinoma tissue using unpurified ab150381 showing +ve staining.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-MUC4 antibody [EPR9308] (ab150381)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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