abcam

Product datasheet

Anti-Gastric Mucin/MUC-6 antibody [EPR20623] ab223846



Overview

Product name Anti-Gastric Mucin/MUC-6 antibody [EPR20623]

Description Rabbit monoclonal [EPR20623] to Gastric Mucin/MUC-6

Host species Rabbit

Tested applications Suitable for: IHC-P, mIHC

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control IHC-P: Human stomach and duodenum tissue. Human gastric cancer tissue. mIHC: Human

stomach tissue.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

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: 0.05% BSA, 40% Glycerol (glycerin, glycerine), PBS

Purity Protein A purified

Clonality Monoclonal
Clone number EPR20623

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Isotype IgG

Applications

Target

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab223846 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	★★★☆☆(1)	1/4000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
mIHC		Use at an assay dependent concentration.

Function	May provide a mechanism for modulation of the composition of the protective mucus layer related to acid secretion or the presence of bacteria and noxious agents in the lumen. Play an important role in the cytoprotection of epithelial surfaces and are used as tumor markers in a variety of cancers. May play a role in epithelial organogenesis.	
Tissue specificity	Expressed in the regenerative zone of gastric antrum, gastric body mucosa and gastric incisura mucosa. Expressed in the deeper mucous glands of gastric antrum. Overexpressed in Helicobacter pylori infected gastric epithelium. Highly expressed in duodenal Brunner's glands, gall bladder, seminal vesicle, pancreatic centroacinar cells and ducts, and periductal glands of the common bile duct.	
Sequence similarities	Contains 1 CTCK (C-terminal cystine knot-like) domain. Contains 1 TIL (trypsin inhibitory-like) domain. Contains 3 VWFD domains.	
Developmental stage	Early expressed in fetal development and was observed in Brunner's glands and pancreatic ducts at 18-19 weeks and in gastric glands at 20 weeks of gestation. Expressed transiently in the nephrogenic zone of the kidney in the early mid-trimester of development. Detected in the epithelium of ureteric buds at 13 weeks and at lower levels from 17 to 23 weeks of gestation.	

O-glycosylated.

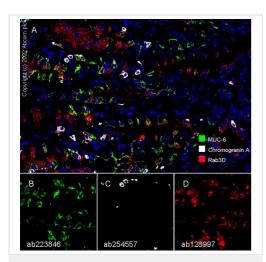
Secreted.

Images

Post-translational

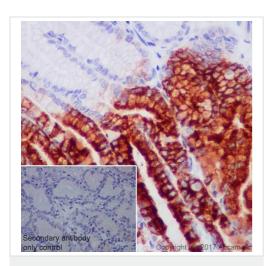
Cellular localization

modifications



Multiplex immunohistochemistry - Anti-Gastric
Mucin/MUC-6 antibody [EPR20623] (ab223846)

Fluorescence multiplex immunohistochemical analysis of the human stomach (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-Chromogranin A (ab254557, gray; Opal™690), anti-MUC-6 (ab223846, green; Opal™520) and anti-Rab3D (ab128997, red; Opal™570) on human stomach. Panel B: anti-MUC-6 stained on mucous neck cells. Panel C: anti-Chromogranin A stained on neuroendocrine cells. Panel D: anti-Rab3D stained on Chief cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4color kit. The section was incubated in three rounds of staining: in the order of ab254557 (1/5000), ab223846 (1/1000), and ab128997 (1/10000) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

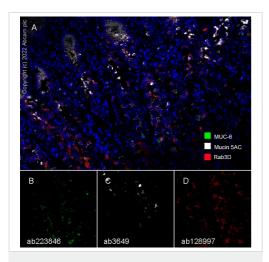


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Gastric Mucin/MUC-6 antibody [EPR20623] (ab223846)

Immunohistochemical analysis of paraffin-embedded human stomach tissue labeling Gastric Mucin/MUC-6 with ab223846 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on human stomach (PMID:17227128). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

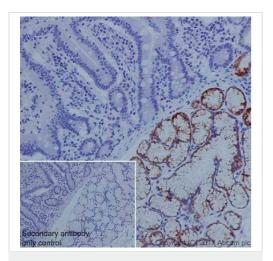
Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



Multiplex immunohistochemistry - Anti-Gastric

Mucin/MUC-6 antibody [EPR20623] (ab223846)

Fluorescence multiplex immunohistochemical analysis of the human stomach (Formalin/PFA-fixed paraffin-embedded sections). Panel A: merged staining of anti-Mucin 5AC (**ab3649**, gray; Opal™690), anti-MUC-6 (ab223846, green; Opal™520) and anti-Rab3D (ab128997, red; Opal™570) on human stomach. Panel B: anti-MUC-6 stained on mucous neck cells. Panel C: anti-Mucin 5AC stained on surface mucous cells. Panel D: anti-Rab3D stained on Chief cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody. The immunostaining was performed on a Leica Biosystems BOND[®] RX instrument with an Opal™ 4-color kit. The section was incubated in three rounds of staining: in the order of ab3649 (1/5000 dilution), ab223846 (1/1000 dilution), and ab128997 (1/10000 dilution) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) was used for 20 mins. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Leica SP8 confocal microscope.

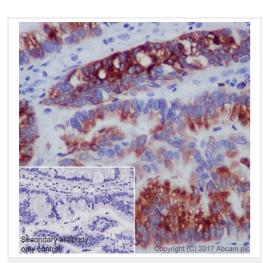


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Gastric Mucin/MUC-6 antibody [EPR20623] (ab223846)

Immunohistochemical analysis of paraffin-embedded human duodenum tissue labeling Gastric Mucin/MUC-6 with ab223846 at 1/4000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Cytoplasmic staining on Brunner's glands of human duodenum (PMID:10681391). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Gastric Mucin/MUC-6 antibody [EPR20623] (ab223846)

Immunohistochemical analysis of paraffin-embedded human gastric cancer tissue labeling Gastric Mucin/MUC-6 with ab223846 at 1/4000 dilution, followed by Goat Anti-Rabbit lgG H&L (HRP) Ready to use. Cytoplasmic staining on human gastric cancer (PMID: 14557879). Counter stained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval using <u>ab93684</u> (Tris/EDTA buffer, pH 9.0).



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