

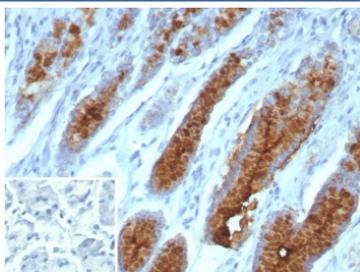
Mucin 5AC Antibody / MUC5AC [clone MUC5AC/7066R] (V9680)

Catalog No.	Formulation	Size
V9680-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9680-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9680SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	MUC5AC/7066R
Purity	Protein A/G affinity
UniProt	P98088
Localization	Cytoplasm
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This recombinant Mucin 5AC antibody is available for research use only.



Immunohistochemistry analysis of Mucin 5AC / MUC5AC antibody (clone MUC5AC/7066R) in human stomach tissue. FFPE human stomach section shows strong cytoplasmic brown chromogenic staining in gastric foveolar epithelial cells lining glandular structures, consistent with MUC5AC expression, while surrounding stromal cells exhibit minimal staining and nuclei appear blue. Heat-induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to staining.

Description

Mucin 5AC antibody targets Mucin 5AC, a secreted gel-forming mucin encoded by the human MUC5AC gene and a major component of the gastric mucus barrier. Mucin 5AC, also widely referred to as MUC5AC in the literature, is

predominantly expressed in gastric foveolar epithelial cells and mucus-producing epithelial cells of the respiratory tract. Mucin 5AC antibody is frequently used in studies of gastric epithelial differentiation, mucosal biology, and tumor pathology because MUC5AC is a defining marker of gastric-type mucin production.

MUC5AC is synthesized as a large, heavily O-glycosylated secreted glycoprotein that polymerizes through disulfide bonding to form the viscoelastic mucus gel protecting the gastric mucosa from acid and digestive enzymes. In normal stomach tissue, Mucin 5AC is localized to the apical cytoplasm and secretory granules of surface epithelial cells. Altered expression patterns have been observed in chronic gastritis, intestinal metaplasia, and gastric carcinoma. Mucin 5AC antibody is therefore valuable for evaluating gastric mucin phenotype and epithelial lineage differentiation in research applications.

Beyond the stomach, aberrant MUC5AC expression has been reported in pancreatic, ovarian, lung, and colorectal carcinomas, particularly in tumors exhibiting mucinous differentiation. Elevated Mucin 5AC levels are also associated with airway inflammatory conditions such as asthma and chronic obstructive pulmonary disease, reflecting its role in mucus hypersecretion and epithelial defense mechanisms.

Structurally, Mucin 5AC contains extensive tandem repeat domains rich in serine and threonine residues that support dense O-glycosylation, along with cysteine-rich domains responsible for mucin polymerization and gel formation. A Mucin 5AC antibody is suitable for detecting MUC5AC expression in gastric epithelium, respiratory mucosa, and mucinous tumors in research applications.

Application Notes

Optimal dilution of the recombinant Mucin 5AC antibody should be determined by the researcher.

Immunogen

Recombinant full-length human protein was used as the immunogen for the recombinant Mucin 5AC antibody.

Storage

Aliquot the recombinant Mucin 5AC antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.