

MUC5AC Monoclonal Antibody (45M1)

Product Details	
Size	500 µL
Species	Chicken, Cat, Human, Mouse, Non-human primate, Pig, Rabbit, Rodent, Rat
Published Species	Artificial Control, Avian, Rat, Pig, Hamster, Human, Mouse, Guinea pig
Expression System	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	45M1
Conjugate	Unconjugated
Immunogen	M1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le(a-b-) patient
Form	Liquid
Concentration	0.2 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_10978001

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	2-3 µg/mL	34 Publications
Immunofluorescence (IF)	2-3 µg/mL	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	1-2 µg/mL	-
ELISA (ELISA)	-	51 Publications
Flow Cytometry (Flow)	-	2 Publications
Immunohistochemistry (IHC)	-	82 Publications
Immunoprecipitation (IP)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication
Neutralization (Neu)	-	1 Publication
Western Blot (WB)	-	25 Publications

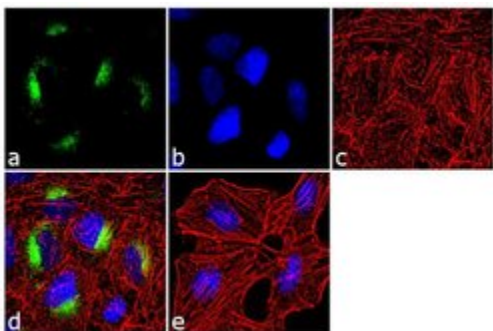
Product Specific Information

MA5-12178 targets Mucin 5AC in IHC (P) and ICC/IF applications and shows reactivity with Chicken, Feline, Human, mouse, Non-human primate, Porcine, Rabbit, Rodent, and Rat samples. The MA5-12178 immunogen is m1 mucin preparation from the fluid of an ovarian mucinous cyst belonging to an O Le(a-b-) patient.

Product Images For MUC5AC Monoclonal Antibody (45M1)

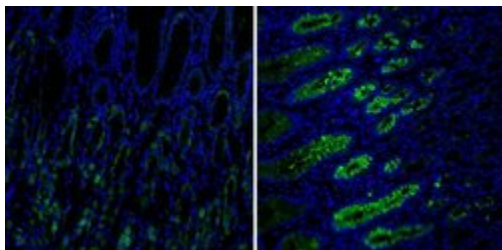
MUC5AC Antibody (MA5-12178) in IF

Immunofluorescence analysis of Mucin 5AC was performed using 70% confluent log phase A549 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 2% BSA for 1 hour at room temperature. The cells were labeled with Mucin 5AC Mouse Monoclonal Antibody (Product # MA5-12178) at 2 µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing cytoplasmic localization. Panel e shows the no primary antibody control. The images were captured at 60X magnification.



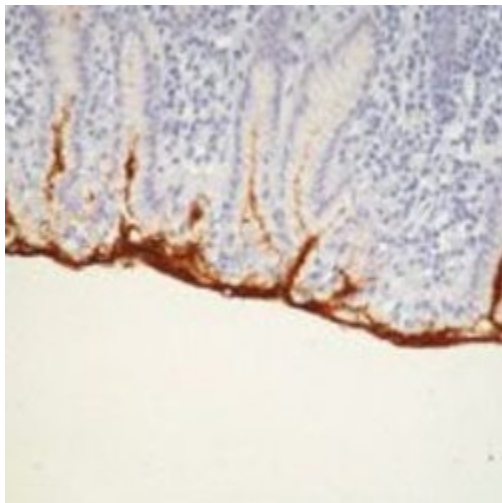
MUC5AC Antibody (MA5-12178) in IHC (P)

Immunofluorescent analysis of Mucin 5AC (green) showing staining in the cytoplasm of human stomach tissue (right) compared to a negative control without primary antibody (left). Formalin-fixed tissue was permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Tissue was probed with a Mucin 5AC monoclonal antibody (Product # MA5-12178) in 3% BSA-PBS at a dilution of 1:20 and incubated overnight at 4°C in a humidified chamber. Tissue was washed with PBST and incubated with a DyLight-conjugated secondary antibody in PBS at room temperature in the dark. Nuclei were stained with Hoechst or DAPI (blue). Images were taken at a magnification of 60x.



MUC5AC Antibody (MA5-12178) in IHC

Formalin-fixed, paraffin-embedded human stomach stained with Mucin 5AC antibody using peroxidase-conjugate and DAB chromogen. Note staining of extracellular mucins in the surface of the stomach.



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Immunofluorescence (5)

Frontiers in immunology

IL-19 Up-Regulates Mucin 5AC Production in Patients With Chronic Rhinosinusitis via STAT3 Pathway.

"MA5-12178 was used in Immunohistochemistry to propose that IL-19 up-regulates MUC5AC-induced mucin production via the STAT3 pathway in CRS, highlighting the important role IL-19 may play in mucin production in chronic respiratory diseases."

Authors: Lai X, Li X, Chang L, Chen X, Huang Z, Bao H, Huang J, Yang L, Wu X, Wang Z, Bellanti JA, Zheng SG, Zhang G

Species
Human
Artificial Control

Dilution
1:200
Not Cited

Year
2020

Nature communications

Engineered amphiphilic peptides enable delivery of proteins and CRISPR-associated nucleases to airway epithelia.

"Published figure using MUC5AC monoclonal antibody (Product # MA5-12178) in Immunofluorescence"

Authors: Krishnamurthy S, Wohlford-Lenane C, Kandimalla S, Sartre G, Meyerholz DK, Théberge V, Hallée S, Duperré AM, Del'Guidice T, Lepetit-Stoffaes JP, Barbeau X, Guay D, McCray PB

Species
Not Applicable

Dilution
Not Cited

Year
2019

[View more IF references on thermofisher.com](#)

Immunohistochemistry (82)

Frontiers in immunology

IL-19 Up-Regulates Mucin 5AC Production in Patients With Chronic Rhinosinusitis via STAT3 Pathway.

"MA5-12178 was used in Immunohistochemistry to propose that IL-19 up-regulates MUC5AC-induced mucin production via the STAT3 pathway in CRS, highlighting the important role IL-19 may play in mucin production in chronic respiratory diseases."

Authors: Lai X, Li X, Chang L, Chen X, Huang Z, Bao H, Huang J, Yang L, Wu X, Wang Z, Bellanti JA, Zheng SG, Zhang G

Species
Human
Artificial Control

Dilution
1:200
Not Cited

Year
2020

Investigative ophthalmology and visual science

A New Ophthalmic Pharmaceutical Formulation, Topical Sulglycotide, Enhances the Ocular Mucin Secretion in Desiccation Stress-Mediated Dry Eye Disease.

"MA5-12178 was used in Immunohistochemistry-immunofluorescence to suggest that topical sulglycotide enhances the ocular mucin secretion in dry eye disease and can be used as a new ophthalmic pharmaceutical material to treat dry eye disease."

Authors: Lee H, Jeon S, Kim CE, Park YJ, Yang J

Species
Mouse

Dilution
1:250

Year
2019

[View more IHC references on thermofisher.com](#)

More applications with references on thermofisher.com

ICC (34) ELISA (51) WB (25) Flow (2) Misc (1) Neu (1) IP (1)

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