abcam

ab245695

Anti-MUC1 antibody [SM3]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.02% Proclin 300 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Native Full Length Protein corresponding to Human MUC1. Database link P15941
Clone number	SM3
Purification technique	Affinity purification Protein A
Light chain type	lambda
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	4 µg/mL
Notes	Microwave.

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

ICC

Tested

Species	Human
Dilution info	10 µg/mL
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	10 µg/mL
Notes	-

WB

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

Target data

See full target information MUC1

Function The alpha subunit has cell adhesive properties. Can act both as an adhesion and an anti-adhesion protein. May provide a protective layer on epithelial cells against bacterial and enzyme attack. The beta subunit contains a C-terminal domain which is involved in cell signaling, through phosphorylations and protein-protein interactions. Modulates signaling in ERK, SRC and NF-kappa-B pathways. In activated T-cells, influences directly or indirectly the Ras/MAPK pathway. Promotes tumor progression. Regulates TP53-mediated transcription and determines cell fate in the genotoxic stress response. Binds, together with KLF4, the PE21 promoter element of TP53 and represses TP53 activity.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

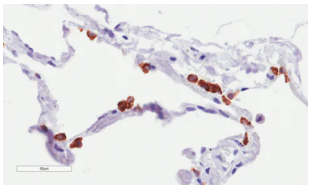
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

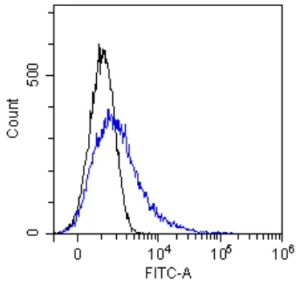
4 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MUC1 antibody [SM3] (ab245695)

MUC1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-MUC1 antibody

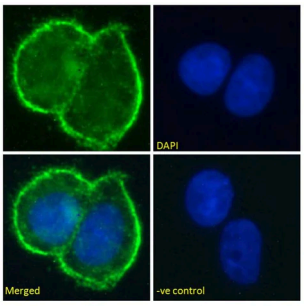
Paraffin-embedded human lung tissue stained for MUC1 with ab245695 at 4 µg/ml, 30 mins in immunohistochemical analysis. Antigen retreival was acheived by microwaving in citrate buffer (pH 6), followed by blocking with protein block serum-free buffer. Samples were then incubated with an anti-rabbit IgG HRP secondary antibody for 20 mins followed by DAB (3,3′-diaminobenzidine), and counterstaining with hemotoxylin.



Flow Cytometry - Anti-MUC1 antibody [SM3] (ab245695)

MUC1 Flow Cytometry staining using rabbit Anti-MUC1 antibody

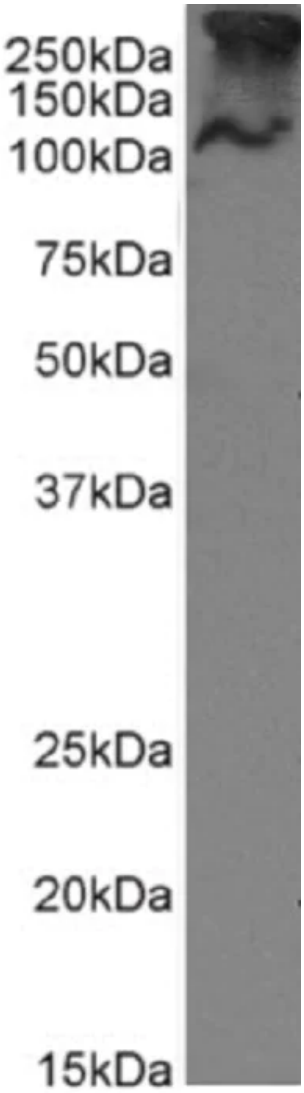
MCF7 (Human breast adenocarcinoma cell line) cells were stained with unimmunized rabbit IgG antibody (black line) or ab245695 (blue line) at a concentration of 10 µg/ml for 30 mins at RT. After washing, bound antibody was detected using anti-rabbit IgG JK (FITC-conjugate) antibody at 2 µg/ml.



Immunocytochemistry - Anti-MUC1 antibody [SM3] (ab245695)

MUC1 Immunocytochemistry staining using rabbit Anti-MUC1 antibody

Immunocytochemical analysis of unpermeabailized paraformaldehyde fixed MCF7 (Human breast adenocarcinoma cell line) cells labeling MUC1 using ab245695 at 10 µg/ml for 1 hour (green) followed by Alexa Fluor® 488 secondary antibody (1 µg/ml). The nuclear counter stain is DAPI (blue).



Western blot - Anti-MUC1 antibody [SM3] (ab245695)

10% SDS PAGE gel.
Detected by chemiluminescence.

All lanes:
Western blot - Anti-MUC1 antibody [SM3] (ab245695) at 1 µg/mL

All lanes:
MCF7 (Human breast adenocarcinoma cell line) cell lysate (RIPA buffer) at 35 µg

Predicted band size: 122 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.