Product Datasheet

Anti-MUC1 [HMFG2] (orb411588)

Catalog Number	orb411588
Description	Mouse monoclonal antibody to MUC1
Species/Host	Mouse
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	ELISA, IHC
Immunogen	High-MW glycoprotein of the human milk fat globule.
Target	MUC1
Preservatives	PBS with 0.02% Proclin 300.
Concentration	1 mg/ml
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Note	For research use only
Isotype	Mouse IgG
Clonality	Monoclonal
Clone Number	HMFG2
Purity	Purified
Uniprot ID	**P15941**
Expiration Date	12 months from date of receipt.

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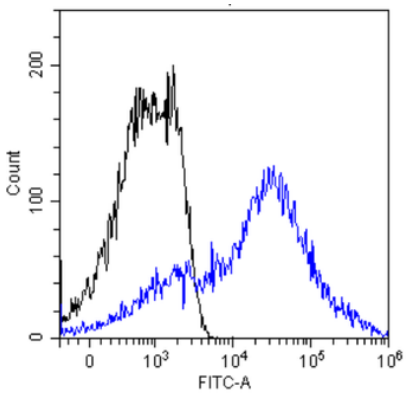
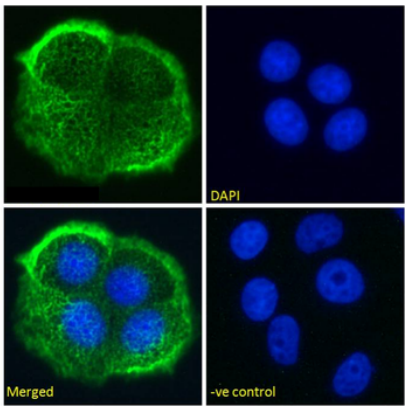
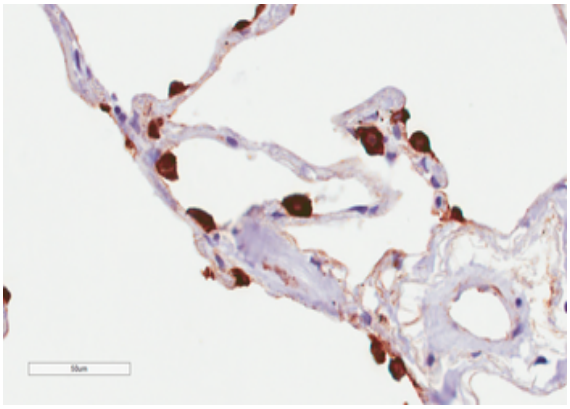


Flow-cytometry using the anti-MUC1 antibody HMFG2 MCF-7 cells were stained with unimmunized rabbit IgG antibody (black line) or the rabbit-chimeric version of HMFG2 (orb411588, blue line) at a concentration of 10 µg/ml for 30 mins at RT. After washing, bound antibody was detected using an anti-rabbit IgG JK (FITC-conjugate) antibody (129936) at 2 µg/ml and cells analyzed on a FACSCanto flow-cytometer.



Immunofluorescence staining of fixed MCF-7 cells with anti-MUC1 antibody HMFG2. Immunofluorescence analysis of unpermeabilisd paraformaldehyde fixed MCF-7 cells on Shi-fix™ coverslips stained with the chimeric rabbit version of HMFG2 (orb411588) at 10 µg/ml for 1h followed by Alexa Fluor® 488 secondary antibody (1 µg/ml), showing membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom orb411588, DAPI, merged channels and an isotype control. The isotype control was stained with an anti-Fluorescein antibody followed by Alexa Fluor® 488 secondary antibody.



Immunohistochemical staining of human lung tissue using anti-MUC1 antibody HMFG2 Anti-MUC1 (Mucin-1) staining of paraffin embedded human lung tissue using the rabbit-chimeric version of HMFG2 (orb411588). Antigen retreival was acheived by microwaving in citrate buffer (pH6), followed by blocking with protein block serum-free buffer. Primary antibody incubation with orb411588 was carried out at 4 µg/ml for 30 minutes. Samples were then incubated with an anti-rabbit IgG HRP secondary antibody for 20 mins followed by DAB (3, 3′-diaminobenzidine), and counter-staining with haemotoxylin. Strong staining of type II pneumocytes may be observed. Recommended concentration, 1-2 µg/ml.

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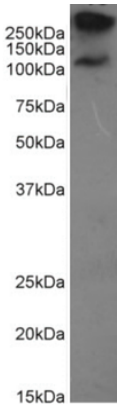

Western Blot using anti-MUC1 antibody HMFG2 MCF-7 cell lysate (35 µg protein in RIPA buffer) were resolved on a 10% SDS PAGE gel and blots probed with the chimeric rabbit version of HMFG2 (orb411588) at 0.1 µg/ml before detection using an anti-rabbit secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence. The predicted band size for unmodified MUC1 is 122.1kDa, though in breast cancer cell lines like MCF-7 MUC1 can be up to 90% glycosylated (T47D cells) and expected band sizes are ~250-300kDa. Thus the two bands likely represent processed (> 250kDa) and unprocessed (~121kDa) populations of the protein. orb411588 successfully detected human MUC1 in MCF-7 breast cancer cells.

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