

# Product Datasheet

## MUC1 Antibody (SM3) - Chimeric - Azide and BSA Free NBP2-62561

Unit Size: 0.2 mg

Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.

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**NBP2-62561**

MUC1 Antibody (SM3) - Chimeric - Azide and BSA Free

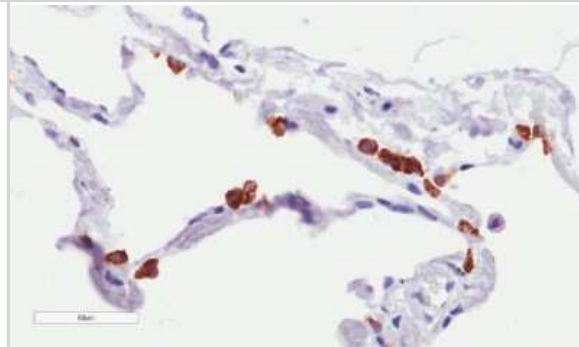
<b>Product Information</b>	
<b>Unit Size</b>	0.2 mg
<b>Concentration</b>	1 mg/ml
<b>Storage</b>	Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	SM3
<b>Preservative</b>	0.02% Proclin 300
<b>Isotype</b>	IgG Lambda
<b>Purity</b>	Protein A purified
<b>Buffer</b>	PBS
<b>Product Description</b>	
<b>Host</b>	Rabbit
<b>Gene ID</b>	4582
<b>Gene Symbol</b>	MUC1
<b>Species</b>	Human
<b>Specificity/Sensitivity</b>	Recognises the under-glycosylated form of human MUC1, a marker of tumours.
<b>Immunogen</b>	Hydrogen fluoride deglycosylated milk mucin.
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, ELISA, Flow Cytometry, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunofluorescence
<b>Recommended Dilutions</b>	Western Blot, Flow Cytometry 1:10 - 1:1000, ELISA 1:100 - 1:2000, Immunohistochemistry, Immunohistochemistry-Paraffin 1:10 - 1:500, Immunohistochemistry-Frozen 1:10 - 1:500, Immunofluorescence
<b>Application Notes</b>	This chimeric rabbit antibody was made using the variable domain sequences of the original murine IgG1 format, for improved compatibility with existing reagents, assays and techniques.

## Images

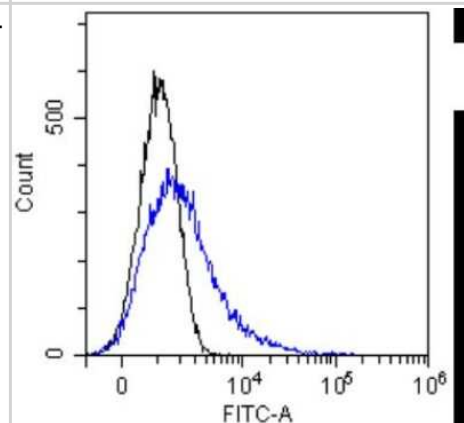
**Western Blot: MUC1 Antibody (SM3) - Chimeric [NBP2-62561]** - Western Blot using anti-MUC1 antibody SM3. MCF-7 cell lysate (35ug protein in RIPA buffer) were resolved on a 10% SDS PAGE gel and blots probed with the chimeric rabbit version of SM3 (NBP2-62561) at 1 ug/ml before detection using an anti-rabbit 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 (c.f. Mueller et al. PMID: 10373415; T47D cells) and expected band sizes are ~250-300kDa. Thus the two bands likely represent processed (>250kDa) and unprocessed (~121kDa) populations of the protein. NBP2-62561 successfully detected human MUC1 in MCF-7 breast cancer cells.



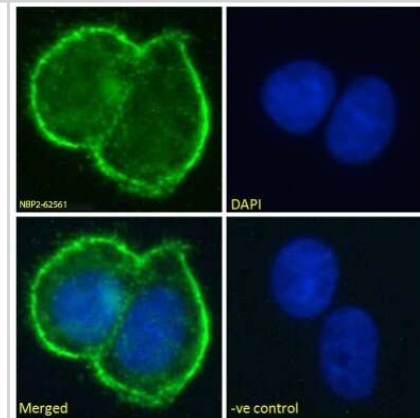
**Immunohistochemistry: MUC1 Antibody (SM3) - Chimeric [NBP2-62561]** - Immunohistochemical staining of human lung tissue using anti-MUC1 antibody. SM3 Anti-MUC1 (Mucin-1) staining of paraffin embedded human lung tissue using the rabbit-chimeric version of SM3 (NBP2-62561). Antigen retrieval was achieved by microwaving in citrate buffer (pH6), followed by blocking with protein block serum-free buffer. Primary antibody incubation with NBP2-62561 was carried out at 4 ug/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 haematoxylin. Staining of type II pneumocytes may be observed. Recommended concentration, 2-4 ug/ml.



**Flow Cytometry: MUC1 Antibody (SM3) - Chimeric [NBP2-62561]** - Flow-cytometry using the anti-MUC1 SM3. MCF-7 cells were stained with unimmunized rabbit IgG antibody (black line) or the rabbit-chimeric version of SM3 (NBP2-62561, blue line) at a concentration of 10 ug/ml for 30 mins at RT. After washing, bound antibody was detected using anti-rabbit IgG JK (FITC-conjugate) antibody at 2 ug/ml and cells analyzed on a FACSCanto flow-cytometer.



**Immunofluorescence: MUC1 Antibody (SM3) - Chimeric [NBP2-62561]** - Immunofluorescence staining of fixed MCF-7 cells with anti-MUC1 antibody SM3. Immunofluorescence analysis of unpermeabilised paraformaldehyde fixed MCF-7 cells on Shi-fix coverslips stained with the chimeric rabbit version of SM3 (NBP2-62561) at 10 ug/ml for 1h followed by Alexa Fluor 488 secondary antibody (1 ug/ml), showing clear membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom; NBP2-62561, DAPI, merged channels and an isotype control. The isotype control was stained with unimmunised rabbit IgG followed by Alexa Fluor 488 secondary antibody.





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### **Products Related to NBP2-62561**

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HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
H00004582-Q01-10ug	Recombinant Human MUC1 GST (N-Term) Protein
1129-ER-050	ErbB2/Her2 [Unconjugated]

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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