

anti-Human MUC1 Antibody | anti-MUC1 antibody

Anti-MUC1 [AR20.5]

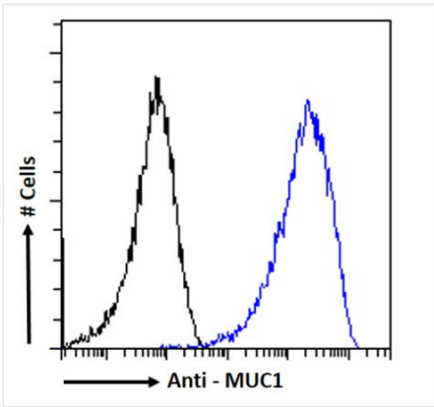
CATALOG #	REACTIVITY	APPLICATIONS
AAA72327	Human	immunoassay, Radioimmunoassay, Immunofluorescence, Functional Assay, Flow Cytometry, Functional Assay, ELISA

PRODUCT SYNONYMS

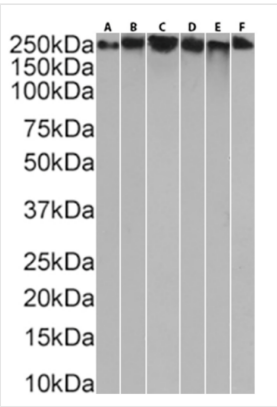
MUC1; Anti-MUC1 [AR20.5]; Mucin-1; Breast carcinoma-associated antigen DF3; Cancer antigen 15-3; CA 15-3; Carcinoma-associated mucin; Episialin; H23AG; Krebs von den Lungen-6; KL-6; PEMT; Peanut-reactive urinary mucin; PUM; Polymorphic epithelial mucin; PEM; Tumor-associated epithelial membrane antigen; EMA; Tumor-associated mucin; CD227; anti-MUC1 antibody

PRODUCT SPECIFICATIONS

Reactivity	Human
Isotype	Mouse IgG1 kappa
Clone Number	AR20.5
Specificity	This antibody is specific for human MUC1. The alpha subunit of MUC1 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 of MUC-1 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.
Purity/Purification	Purified. Protein A affinity purified
Form/Format	PBS with 0.02% Proclin 300.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-MUC1 antibody	RIA (Radioimmunoassay), IF (Immunofluorescence), FA (Functional Assay), FCM/FACS (Flow Cytometry), ELISA
Preparation and Storage	Store at 4 degree C for up to 3 months. For longer storage, aliquot and store at -20 degree C.



IF (Immunofluorescence)
Immunofluorescence staining of MCF7 cells with Anti-MUC1 AR20.5 Immunofluorescence analysis of paraformaldehyde fixed MCF7 cells stained with the chimeric mouse IgG1 version of AR20.5 (AAA72327) (1:100 dilution) for 1h followed by Alexa Fluor 488 secondary antibody (1:1000 dilution), showing membrane staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom AAA72327, DAPI, merged channels and an isotype control. The isotype control was an unknown specificity antibody (isotype control, black line) or the mouse IgG1 version of AR20.5 (AAA72327, blue line) at a dilution of 1:100 for 1h at RT. After washing, the bound antibody was detected using a goat anti-rabbit IgG AlexaFluor 488 antibody at a dilution of 1:1000 and cells analyzed using a FACSCanto flow-cytometer.



WB (Western Blot)
Western Blot using Anti-MUC1 antibody AR20.5 . A431(A) (0.001ug/ml), HeLa(B) (0.001ug/ml), MCF7(C) (0.0001ug/ml), human lung(D) (0.001ug/ml), human breast carcinoma(E) (0.0001ug/ml) and human colorectal carcinoma(F) (0.001ug/ml) tissue lysates (35ug protein in RIPA buffer) were resolved on a SDS PAGE gel and blots were probed with the chimeric mouse version of AR20.5 (AAA72327) before detection using an anti-mouse secondary antibody. A primary incubation of 1h was used and protein was detected by chemiluminescence.

ADDITIONAL INFORMATION

Related Product Information for anti-MUC1 antibody	This antibody was raised by immunizing BALB/c mice with MUC1. Describes the generation and characterization of this antibody. This reformatted mouse antibody was made using the variable domain sequences of the original Mouse IgG format for improved compatibility with existing reagents assays and techniques.
Product Categories/Family for anti-MUC1 antibody	cancer; oncology
References	Qi et al. Hybrid Hybridomics. 2001;20(5-6):313-24.

NCBI AND UNIPROT INFORMATION

NCBI GI #	67189007
NCBI GeneID	4582
NCBI Accession #	NP_001018016.1
NCBI GenBank Nucleotide #	NM_001018016.2
UniProt Accession #	P15941; P13931; P15942; P17626; Q0VAP6; Q14128; Q14876; Q16437; Q16442; Q16615; B1AVQ8; B1AVR0
Molecular Weight	122,102 Da
NCBI Official Full Name	mucin-1 isoform 2
NCBI Official Synonym Full Names	mucin 1, cell surface associated
NCBI Official Symbol	MUC1
NCBI Official Synonym Symbols	EMA; PEM; PUM; KL-6; MAM6; PEMT; CD227; H23AG; MUC-1; CA 15-3; MUC-1/X; MUC1/ZD; MUC-1/SEC
NCBI Protein Information	mucin-1; episialin; DF3 antigen; H23 antigen; cancer antigen 15-3; krebs von den Lungen-6; mucin 1, transmembrane; tumor-associated mucin; carcinoma-associated mucin; polymorphic epithelial mucin; peanut-reactive urinary mucin; tumor associated epithelial
UniProt Protein Name	Mucin-1

UniProt Gene Name	MUC1
UniProt Synonym Gene Names	PUM; MUC-1; CA 15-3; KL-6; PUM; PEM; EMA; MUC1-NT; MUC1-alpha; MUC1-beta
UniProt Entry Name	MUC1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-antibody/muc1/72327>