bsm-51126M **[Primary Antibody]**

MUC1 Mouse mAb

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DATASHEET

Host: Mouse
Isotype: IgG2b
Clonality: Monoclonal
CloneNo.: M5C7
GeneID: 4582
SWISS: P15941
Target: MUC1
Purification: affinity purified by Protein G
Concentration: 1mg/ml
Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300. Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: MUC1 is a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. It is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and overexpressed abundantly in >90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four cebB receptors and localize with erbB1 (EGFR) in lactating glands. The MUC1 gene contains seven exons and produces several different alternatively spliced variants. The major expressed form of MUC1 uses all seven exons and is a type 1 transmembrane protein with a large extracellular tandem repeat domain. The tandem repeat domain is highly O glycosylated and alterations in glycosylation have been shown in epithelial cancer cells.

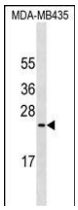
Applications: **WB** (1:100-300)
Flow-Cyt (1ug/Test)
ICC/IF (1:100)

Reactivity: Human

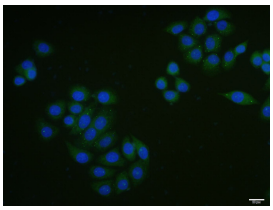
Predicted MW.: 20 kDa

Subcellular Location: Secreted ,Cell membrane ,Cytoplasm ,Nucleus

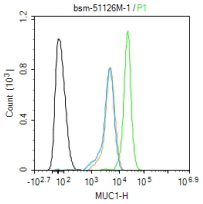
VALIDATION IMAGES



Sample: Lane 1: MDA-MB435 cell lysates Primary: Anti-MUC1 (bsm-51126M) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Mouse IgG at 1/20000 dilution Predicted band size: 20 kD Observed band size: 24 kD



MCF7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (MUC1) monoclonal Antibody, Unconjugated (bsm-51126M) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Mouse IgG antibody at 37°C for 90 minutes, DAPI (blue, C02-04002) was used to stain the cell nuclei.



Blank control（black line）:MCF-7. Primary Antibody (green line): Mouse Anti-MUC1 antibody (bs-52116M) Dilution:1ug/Test; Secondary Antibody（white blue line）: Goat anti-Mouse IgG-AF488 Dilution: 0.5ug/Test. Isotype control（orange line）: Normal Mouse IgG Protocol The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=5.81]** Zhao Ting. et al. Berberine Inhibits the Adhesion of Candida albicans to Vaginal Epithelial Cells. Front Pharmacol. 2022 Feb;0:511 WB ;Human. 35295335

- **[IF=3.909]** Sun, Y et al.Modified apple polysaccharide influences MUC-1 expression to prevent ICR mice from colitis-associated carcinogenesis.Int. J. Biol. Macromol. 2018 Sep 25 ;120(Pt B) ELISA ;Mouse. 30266641
- **[IF=3.829]** Wang Ruibiao. et al. Effects of exosomes derived from Trichinella spiralis infective larvae on intestinal epithelial barrier function. VET RES. 2022 Dec;53(1):1-11 WB ;Pig. 36273217
- **[IF=3.9]** Haiwei Hu. et al.Anti-cystitis glandularis action exerted by glycyrrhetinic acid: bioinformatics analysis and molecular validation.MOLECULAR DIVERSITY.2025 Jan 28. IF ;Human, Mouse. 39873885