

# **Human MUC-4 Antibody**

Monoclonal Mouse IgG<sub>2B</sub> Clone # 781631 Catalog Number: MAB8195

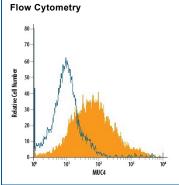
DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human MUC4 in ELISA.	
Source	Monoclonal Mouse IgG <sub>2B</sub> Clone # 781631	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	E. coli-derived recombinant human MUC4 Pro1072-Ser1317 Accession # Q99102	
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.	

#### APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Flow Cytometry	2.5 μg/10 <sup>6</sup> cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

### DATA



Detection of MUC4 in MCF-7
Human Cell Line by Flow
Cytometry. MCF-7 human breast
cancer cell line was stained with
Mouse Anti-Human MUC4
Monoclonal Antibody (Catalog #
MAB8195, filled histogram) or
isotype control antibody (Catalog #
Catalog # MAB0041, open
histogram), followed by
Allophycocyanin-conjugated AntiMouse IgG Secondary Antibody
(Catalog # F0101B).

# PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/mL in sterile PBS

Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

\*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

MUC-4 (Mucin-4), also called ASGP (ascites sialoglycoprotein) is a highly glycosylated type I transmembrane glycoprotein that may be up to 950 kDa in its full-length, fully glycosylated form. Human MUC-4 cDNA encodes 2169 amino acids (aa) with a 28 aa signal sequence and a cleavage site that creates a 1416 aa soluble, extracellular alpha chain and a 725 aa single-pass transmembrane beta chain. Between aa 1072-1317 within the alpha chain, human MUC-4 shares 69% aa sequence identity with mouse and rat MUC-4. At least 14 soluble or transmembrane splice variants of 1102-2117 aa have been described, 5 of which contain the full sequence used as an immunogen. Muc-4 can serve as a ligand for the oncogenic receptor ErbB2 and a modulator of its phosphorylation and signaling. MUC-4 is frequently aberrantly expressed in epithelial tumors and can promote tumor growth and metastasis.

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