

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human MUC-1 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human (rh) MUC-20, rhMUC-20S, or rhCA125/MUC-16 was observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 604804
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human MUC-1 Pro126-Arg145 Accession # P15941
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

## 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
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	MCF-7 human breast cancer cell line

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

MUC-1 (Mucin-1; also PEM, PEMT, Episialin, tumor-associated mucin, and carcinoma associated mucin) is a 240-450 kDa type I transmembrane glycoprotein. Human MUC-1 is 1255 amino acids (aa) in length and contains a 23 aa signal sequence, a 1135 aa extracellular domain (ECD), a 23 aa transmembrane segment, and a 74 aa cytoplasmic tail. The ECD consists of degenerate tandem repeats and a tandem repeat region, which makes up the major portion of the protein. Potential O-glycosylation sites (serines and threonines) make up more than one-fourth of the amino acids. Splicing variants produce ten isoforms for human MUC-1. Human MUC-1 is 28% aa identical to mouse MUC-1.

## PRODUCT SPECIFIC NOTICES

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