

## 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 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.