

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human MUC4 in ELISA.
Source	Monoclonal Mouse IgG _{2B} Clone # 781631
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human MUC4 Accession # Q99102
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	MCF-7 human breast cancer cell line

PREPARATION AND STORAGE

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

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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