



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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**Muc1. Mouse Monoclonal Antibody**  
Episialin

**BACKGROUND**

Muc1 is a heavily O-glycosylated transmembrane protein expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and overexpressed in >90% breast carcinomas and metastases. In normal mammary gland it is expressed in apical surface of glandular epithelium. In breast cancer Muc1 is overexpressed; is underglycosylated and the apical localization is lost. Muc1 is transcribed as a larger precursor which is cleaved to form a larger mucin like subunit (265-400kDa) and a smaller subunit (14-28kDa) noncovalently associated with each other. Transgenic Muc1 has been shown to associate with all four erbB receptors and localize with erbB1 (EGFR) in lactating glands<sup>1</sup>. Muc1 can act as a ligand for ICAM-1 on HUVEC cells; it can bind  $\beta$ -catenin, GSK3 $\beta$  and it associates with Grb2-SOS upon phosphorylation.

**IMMUNOGEN**

Hybridoma produced by the fusion of splenocytes from BALB/c mice immunized with a Muc1 60mer tandem repeat NH<sub>2</sub>-(VTSAPDTRPAPGSTAPPAHG)<sub>3</sub>-COOH and mouse myeloma SP2 cells.

**POSITIVE CONTROL/TISSUE EXPRESSION**

MCF-7 and T47D cells

**COMMENTS**

Antibody can be used for immunohistochemistry on frozen and paraffin embedded tissues, ELISA and Western blotting. Optimal concentration should be evaluated by serial dilutions. Antibody can only detect Muc1 if the threonine residue of the PDTRPAP of the tandem repeat region is non-glycosylated<sup>4</sup>.

**ORDERING INFORMATION**

**CATALOG NUMBER**

X1602M

**SIZE**

100  $\mu$ g

**FORM**

Unconjugated

**HOST/CLONE**

Mouse Clone VU-4H5

**FORMULATION**

Provided as solution in phosphate buffered saline with 0.08% sodium azide

**CONCENTRATION**

See vial for concentration

**ISOTYPE**

IgG1

**APPLICATIONS**

Immunohistochemistry (Frozen & Paraffin), ELISA, Western Blot

**SPECIES REACTIVITY**

Human

**ACCESSION NUMBER**

P15941, Human

**PURIFICATION**

Protein A/G Chromatography

**SHIP CONDITIONS**

Ship at ambient temperature, freeze upon arrival

**STORAGE CUSTOMER**

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

**STABILITY**

Products are stable for one year from purchase when stored properly

**REFERENCES**

1. Mommers E C, et al. 'Abberant expression of MUC1 mucin in ductal hyperplasia and ductal carcinoma In situ of the breast.' Int J Cancer 1999: 84:466-469.
2. Schol, D.J. et al., Epitope fingerprinting using overlapping 20-mer peptides of the MUC 1 tandem repeat sequence. Tumor Biol. Suppl. 1998: 19, 35-45.
3. Ryuko K et al. 'Characterization of a new MUC1 monoclonal antibody (VU-2-G7) directed to the glycosylated PDTR sequence of MUC1.' Tumor Biology 2000: 21, 197-210.
4. ten Berge, R.L., et al. 'MUC1 (EMA) is preferentially expressed by ALK positive anaplastic large cell lymphoma, in the normally glycosylated or only partly hypoglycosylated form.' J. Clin. Pathol. 2001, 54, 933-939.
5. Treon, S.P., et al. 'Muc-1 Core Protein Is Expressed on Multiple Myeloma Cells and Is Induced by Dexamethasone.' Blood 1999, 93, 1287-1298.

**PRODUCT SPECIFIC REFERENCES**