



**Category:** Monoclonal Antibodies      **Cat. #** V7033      **Product Name:** MUC1 (Polymorphic Epithelial Mucin)-B413

**Description:**  
Monoclonal Mouse Anti-Human Polymorphic Epithelial Mucin, MUC1

**Immunogen:**  
Human breast cancer cell line ZR-75-1.

**Application:**  
Immunohistochemistry 1:50-1:100; ELISA 1:500-1:5000.

**Species Reactivity:**  
Human. Others not tested.

**Recommended Positive Control:**  
Breast Carcinoma, Colon Carcinoma and Ovarian Carcinoma. Normal Breast, small Intestine, Colon.

**Presentation:**  
20 mM tris-borate, 150 mM Sodium Chloride, and 0.05% Sodium Azide, pH 7.5.

**Aliquoting Instructions:**  
In general, the 0.05M borate pH 8.0 containing 0.15M sodium chloride, 0.02% sodium azide, is a good diluent to use with most antibodies. When diluting for immunohistochemistry, ELISA or western blot, make the dilution in Primary Antibody Diluting Buffer. Avoid diluting the entire contents of the vial at once since the diluted solution may have reduced stability.

**Staining Procedure:**  
This antibody can be used on frozen and formalin-fixed, paraffin-embedded tissue sections. Prolonged fixation in buffered formalin can destroy the epitope. The antibody may be used at a dilution of 1:50-1:100 with LAB/Probe Mouse/Rabbit kits. It is recommended that this product be used on frozen tissue sections or specimens. The optimal conditions should be determined by the individual laboratory.

**Specificity:**  
This antibody reacts with MUC1, a large transmembrane glycoprotein expressed on the ductal surface of normal glandular epithelia. The extracellular domain of MUC1 largely consists of a highly conserved, O-glycosylated 20 aminoacids tandem repeat which can occur 30-100 times per molecule depending on the length of the allele involved. In the vast majority of human carcinomas this protein is upregulated and poorly glycosylated and appears on the cell surface in a non-polarized fashion. The dominant epitope of this antibody is the 8-mer SAPDTRPA of the MUC1 tandem repeat as established with "epitope fingerprinting."

**Storage:**  
Store at 2~8o C for short term, freeze under -20oC for long term storage.

**Size:** 0.2mg  
**Clone:** B413 (VU-3-D1)  
**Isotype:** IgG1, k  
**Host:** Mouse  
**Form:** Purified  
**Concentration:** 0.5 mg/ml  
**Units On Hand:** YES

**References:**  
1. Schol, D.J., et al., "Epitope fingerprinting" using overlapping 20-mer peptides of the MUC1 tandem repeat sequence. Tumor Biol. Suppl.in press.  
2. Price, N.R., et al., Analysis of 56 monoclonal antibodies against the MUC1 mucin. Tumor Biol. Suppl. in press.

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