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# MUC-1 (Clone ZM32)

## Mouse Monoclonal Antibody

**Specificity:** Human and Mouse. Others not tested

**Immunogen:** Human milk-fat globule membranes (HMFGM)

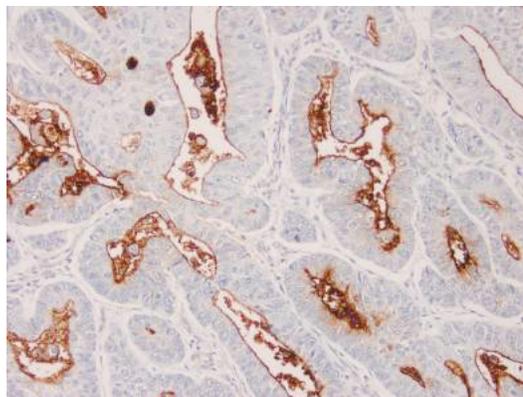
**Ig Class:** IgG1/ $\kappa$

**Storage:** Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months

**Staining procedures:** Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* Pretreatment of deparaffinized tissue with heat-induced epitope retrieval is recommended. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:100-200; *Positive Control:* Breast carcinoma. *Cellular Localization:* Cytoplasmic. *Intended Use:* In vitro diagnosis (IVD).

**Description:** This MAb reacts with MUC1. The dominant epitope of this MAb has not yet been determined. MUC1 is a large cell surface mucin glycoprotein expressed by most glandular and ductal epithelial cells and some hematopoietic cell lineages. It is expressed on most secretory epithelium, including mammary gland and some hematopoietic cells. It is expressed abundantly in lactating mammary glands and over expressed abundantly in >90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four c-erbB receptors and localize with c-erbB1 (EGFR) in lactating glands. The MUC1 gene contains seven exons and produces several different alternatively spliced variants. The major expressed form of MUC1 uses all seven exons and is a type 1 transmembrane protein with a large extracellular tandem repeat domain. The tandem repeat domain is highly O glycosylated and alterations in glycosylation have been shown in epithelial cancer cells. Antibody to EMA is useful as a pan-epithelial marker for detecting early metastatic loci of carcinoma in bone marrow or liver.

**Supplied As:** Purified antibody from ascites fluid by Protein G chromatography in 0.2% BSA and 15mM sodium azide.



*Formalin-fixed, paraffin-embedded human cholangiocarcinoma stained with anti-MUC-1 antibody using peroxidase-conjugate and DAB chromogen. Note the cytoplasmic staining of tumor cells*

Cat. #Z2336 (1.0 ml)