



## **Product Information Sheet**

## Monoclonal Anti-Episialin, EMA (Sepharose Bead Conjugate)

Catalogue No. MA1039-S	Immunogen
Lot No. 08A12	Human milk fat globule membranes.
Clone: EMA-39	Purification
Ig type: mouse IgG1	Purified by the goat anti-mouse IgG affinity chromatography.
<b>Size:</b> 200µl	Formulation
Specificity	50% slurry in PBS pH 7.2 with 0.01mg NaN <sub>3</sub> a <sub>3</sub> preservative.
Human.	Storage
No cross reactivity with other	Store at 4°C for frequent use.
proteins.	Description:
Recommended application	This Antagene antibody is immobilized via covalent binding of primary amino
Immunoprecipitation(IP)	groups to N-hydroxysuccinimide (NHS)-activated sepharose beads. It is useful
	for immunoprecipitation assays.

## BACKGROUND

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 overexpressed abundantly in >90% breast carcinomas and metastases. Transgenic MUC1 has been shown to associate with all four cebB receptors and localize with 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.

## REFERENCE

1. Lu, W.; Hisatsune, A.; Koga, T.; Kato, K.; Kuwahara, I.; Lillehoj, E. P.; Chen, W.; Cross, A. S.; Gendler, S. J.; Gewirtz, A. T.; Kim, K. C. : Cutting edge: enhanced pulmonary clearance of Pseudomonas aeruginosa by Muc1 knockout mice. *J. Immun.* 176: 3890-3894, 2006.

2. Sood, R.; Zehnder, J. L.; Druzin, M. L.; Brown, P. O. : Gene expression patterns in human placenta. *Proc. Nat. Acad. Sci.* 103: 5478-5483, 2006.

3. Wei, X.; Xu, H.; Kufe, D. : MUC1 oncoprotein stabilizes and activates estrogen receptor alpha. *Molec. Cell* 21: 295-305, 2006.