

## Product datasheet for **AM32842PU-T**

### EMA (MUC1) Mouse Monoclonal Antibody [Clone ID: GP1.4]

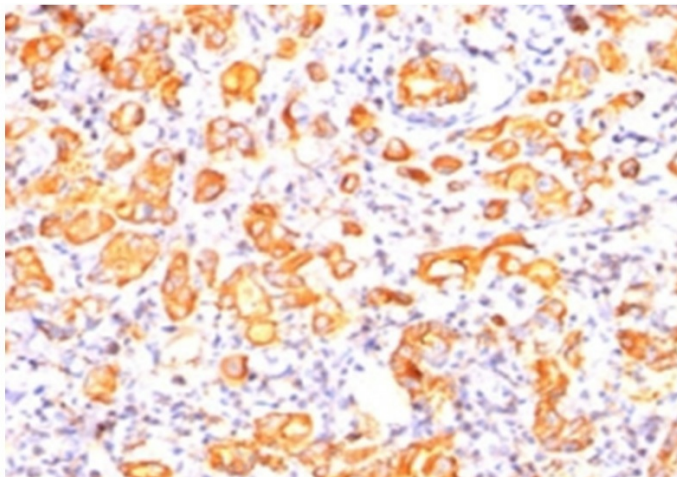
#### Product data:

Product Type:	Primary Antibodies
Clone Name:	GP1.4
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	<b>ELISA</b> (For coating, order Ab without BSA). <b>Western Blot:</b> 0.5-1 µg/ml. <b>Flow Cytometry:</b> 0.5-1 µg/10 <sup>6</sup> cells. <b>Immunofluorescence:</b> 1-2 µg/ml. <b>Immunoprecipitation:</b> 1-2 µg/500 µg protein lysate. <b>Immunohistochemistry on Frozen and Paraffin Sections:</b> 0.5-1 µg/ml for 30 minutes at RT. No special pretreatment is required for staining of formalin/paraffin tissues. <b>Recommended Positive Control:</b> MCF-7 or MDA-231 cells, Breast or Colon carcinoma.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human milk fat globule membranes.
Specificity:	<p>This <i>GP1.4</i> Monoclonal antibody (Cat.-No AM32842PU) is specific to epithelial membrane antigen (EMA), also called Mucin-1 (MUC-1), CA15-3, CA27-29, CD227, DF3, H23AG, KL-6, MAM6, PEM, PEMT, and PUM.</p> <p>In Western blotting, it recognizes proteins in MW range of 265-400kDa, identified as different glycoforms of EMA. This <i>GP1.4</i> Monoclonal antibody (Cat.-No AM32842PU) reacts with the DTRP epitope in the tandem repeats. The alpha subunit has cell adhesive properties. It can act both as an adhesion and an anti-adhesion protein. EMA may provide a protective layer on epithelial cells against bacterial and enzyme attack. The beta subunit contains a C-terminal domain, which is involved in cell signaling, through phosphorylations and protein-protein interactions.</p> <p>In immunohistochemical assays, it superbly stains routine formalin/paraffin carcinoma tissues without any special pretreatment.</p> <p>Antibody to EMA is useful as a pan-epithelial marker for detecting early metastatic loci of carcinoma in bone marrow or liver.</p> <p><b>Cellular Localization:</b> Cell membrane and cell surface.</p>



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<b>Formulation:</b>	10mM PBS State: Purified State: Liquid purified IgG fraction Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
<b>Concentration:</b>	lot specific
<b>Purification:</b>	Protein A/G Chromatography
<b>Conjugation:</b>	Unconjugated
<b>Storage:</b>	Store undiluted at 2-8°C.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>Predicted Protein Size:</b>	265-400 kDa
<b>Gene Name:</b>	mucin 1, cell surface associated
<b>Database Link:</b>	<a href="#">Entrez Gene 4582 Human P15941</a>
<b>Background:</b>	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.
<b>Synonyms:</b>	MUC-1, PEMT, Episialin, EMA, H23AG, PUM, DF3, CA 15-3

**Product images:**

Formalin-Fixed, Paraffin-Embedded Human breast cancer stained with CD227 / Mucin-1 / MUC1 Antibody (Clone GP1.4). Note cytoplasmic and membrane staining.