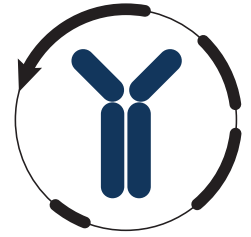


# Datasheet



Mouse mAb to **MUC1 / EMA /  
PEM / CD227**  
Clone **GP1.4**  
Isotype **IgG1-κ**

## Source

A BALB/c mouse was immunized with human milk fat globule membranes.  
Fusion partner: P3-X63-Ag8.653.

## Specifications

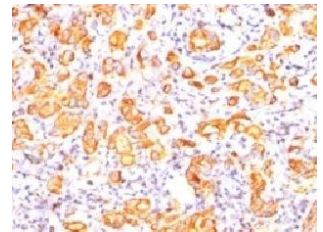
GP1.4 reacts with TRPAPGS in the VNTR domain of human MUC1, also called Epithelial Membrane Antigen (EMA; 265-400 kDa). Other synonyms include episialin, polymorphic epithelial mucin (PEM), MAM6 and CA15-3. GP1.4 was typed at the ISOBM TD-4 Workshop.

## Species reactivity

Positive: human.

## Applications

In immunohistochemistry GP1.4 superbly stains routine formalin/paraffin carcinoma tissues. In ELISA GP1.4 is also excellent as solid phase antibody for detecting cancer specific MUC1 relative to normal MUC1, ranking 4th among the 56 antibodies in the TD-4 workshop.



**Figure 1:** Breast cancer stained with GP1.4 (paraffin)

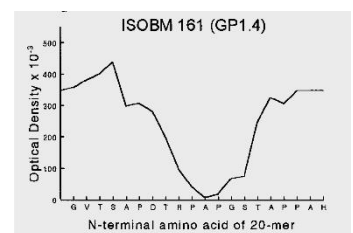
ELISA	Flow cytometry	Frozen sections	Immunofluorescence	Paraffin sections	Western blot
+	+	+	+	Citrate	+

## Format

Produced in tissue culture, contains no host Ig. Antibodies are affinity purified and presented in PBS with 0,02 % sodium azide.  
Stored at 4°C- 8°C, shelf life is at least 24 months after purchase.

## Dilution advice

- ELISA (solid phase: 0,1-100 µg/ml; tracer: 0,001-100 µg/ml for 30 min at RT).
- Flow Cytometry (0,5-1,0 µg/million cells in 0,1 ml).
- Immunoblotting (1-2 µg/ml).
- Immunofluorescence (1-2 µg/ml).
- Immunohistology (formalin-fixed: 1-2 µg/ml for 30 min at RT; requires boiling tissue sections in 10mM citrate buffer, pH 6,0, for 10-20 min. followed by cooling at RT for 20 min).



**Figure 2:** Epitope of GP1.4 as determined by epitope fingerprinting

## Positive control

MCF-7 or MDA-231 cells. Breast, colon, ovarian, endometrial carcinoma.

# Datasheet



## References

- Stanley, CM. et al. *Am. J. Physiol.* **277(1 Pt 1)**: G191-200 (1999).
- ISOBM TD-4 Workshop report, *Tumor Biol.* **19(Suppl 1)** (1998).
- Bjerner, J. et al. *Tumor Biology* **23(6)** (2002).