

# Datasheet



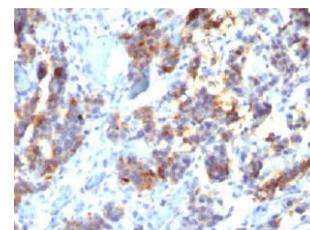
Mouse mAb to **MUC5AC/M1**  
Clone **45M1**  
Isotype **IgG1-κ**

## Source

A BALB/c mouse was immunized with mucin isolated from an ovarian cyst fluid (pure endocervical type according to the Fenoglio's classification) from an ALe<sup>b</sup> patient.  
Fusion partner: SP2/0.

## Specifications

45M1 recognizes the peptide core of gastric mucin M1 (now: MUC5AC), and more specifically with the 'h' epitope amongst the a, b, c, d, e, f, g and h protein core epitopes defined by Bara for M1. 45M1 and 2-12M1 both specifically react with epitopes located in the C-terminal cysteine rich part of the peptide core of MUC5AC. MUC5AC is present in primary ovarian mucinous cancer and gastric cancer, but usually absent in colorectal adenocarcinoma, thus showing an expression pattern opposite to MUC2. Anti-MUC5AC may be useful for differential identification of primary mucinous ovarian tumors from colon adenocarcinoma metastatic to the ovary. MUC5AC antibodies may also be useful for identification pancreatic carcinoma and pre-cancerous changes vs. normal pancreas.



**Figure 1:** Gastric cancer stained with 45M1 (paraffin)

## Species reactivity

Positive: cat, chicken, hedgehog, human, monkey, mouse, pig, rabbit, rat.  
Negative: cow.

## Applications

45M1 reacts with MUC5AC after citrate (/periodate) pretreatment. Immunoblotting: strongly positive without betha-mercaptoethanol pretreatment of mucin solution. ELISA or IRMA as component of a mixture of anti-M1 MABs.

| ELISA | Frozen sections | Paraffin sections | Western blot |
|-------|-----------------|-------------------|--------------|
| +     | +               | Citrate/periodate | +            |

## 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).
- Immunoblotting (1-2 µg/ml).
- Immunohistology (1-2 µg/ml for 30 min at RT; staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes; staining is enhanced by subsequent incubation in 20mM periodic acid in 50mM acetate buffer pH 5.0 for 30 minutes at RT in the dark).

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## Positive control

Stomach, gastric cancer.

## References

- Bara, J. et al, *Int. J. Cancer* **47**: 304-310 (1991).
- Bara, J. et al, *J. Immunol. Methods* **149**: 105-113 (1992).