

Anti-Human MICA/B Monoclonal Antibody BAMO1

Antigen: **Human MICA and MICB**

Clone: BAMO1, mouse IgG1

Catalog Number: BAMO1-50

Applications:

Specificity: binds: MICA*01, MICA*04, MICA*07, MICA*08

MICB*02

Epitope: in $\alpha 1\alpha 2$ superdomain of MICA/B

linear epitope independent of glycosylation

Flow cytometry, ELISA, Immunoblot

Size: 50 µg, 1.0 mg/ml, in 0.05 ml phosphate-buffered saline, pH 7.4 with 0.05%

> sodium azide (Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially

explosive deposits in plumbing).

For immunoblotting we recommend a final dilution of 1 µg BAMO1/ml. **Usage:**

In general, for flow cytometry we recommend a final dilution of 10µg mAb/ml

and for ELISA 1-10 µg mAb/ml.

Purification: Protein A affinity chromatography

Store at 4°C. For long-term storage freezing at -80°C is recommended. Storage:

Description: MICA and MICB (MHC class I-related chain A) are polymorphic, human MHC-

> encoded cell surface glycoproteins and ligands of the activating C-type lectinlike immunoreceptor NKG2D [1-5]. NKG2D engagement of MICA/B activates NK cells and costimulates CD8 T cells [3,6]. MICA is expressed on gastrointestinal epithelium and inducible by cell stress, viral and bacterial infection [2,6-8]. MICA and MICB are also expressed by malignant epithelial and haematopoietic cells, and MICA expression has been shown to enhance tumor rejection in vivo [9-12]. Tumor cells shed soluble MICA and MICB which are detectable in sera of patients with epithelial and haematopoietic

malignancies and may counteract tumor immunosurveillance [10,12-14].

Conditions: For research use only. Not for use in diagnostic or therapeutic

procedures. BAMOMAB is not responsible for any patent infringements

caused by the use of this product.

Country of Origin: Germany

Literature: 1. Bahram S et al. Proc Natl Acad Sci USA 91, 6259-6263 (1994).

2. Groh V et al. Proc Natl Acad Sci USA 93, 12445-12450 (1996).

Bauer S et al. Science 285, 727-729 (1999).

Steinle A et al. *Immunogenetics* **53**, 279-287 (2001).

Li P et al. Nat Immunol 2, 443-451 (2001).

Groh V et al. Nat Immunol 2, 255-260 (2001)

Spies T Proc Natl Acad Sci USA 99, 2584-2586 (2002).

Welte S et al. Eur J Immunol 33, 194-203 (2003)

Groh V et al. Proc Natl Acad Sci USA 96, 6879-6884 (1999).

10. Salih HR et al. Blood 102, 1389-1396 (2003).

11. Friese MA et al. Cancer Res 63, 8996-9006 (2003). 12. Wiemann K et al. J Immunol 175, 720-729 (2005).

13. Salih HR et al. J Immunol 169, 4098-4102 (2002).

14. Groh V et al. Nature 419, 734-738 (2002).

Human B cell line C1R transfected with vector (light grey), MICA*01 (black), or MICB*02 (dark grey), was stained with

BAMO1 and anti-mouse Ig-PE conjugate.