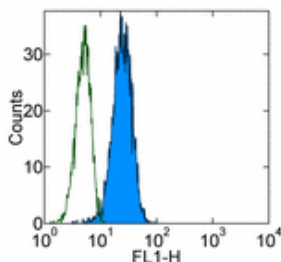


## Anti-Human MICA/B Purified

Catalog Number: 14-5788

Also Known As: MICA/MICB, MICA, MICB

RUO: For Research Use Only



Staining of HeLa cell line with 0.25  $\mu$ g of Mouse IgG2a  $\kappa$  Isotype Control Purified (cat. 14-4724) (open histogram) or 0.25  $\mu$ g of Anti-Human MICA/B Purified (filled histogram) followed by Anti-Mouse IgG FITC (cat. 11-4011). Total viable cells were used for analysis.

### Product Information

Contents: Anti-Human MICA/B Purified

**REF** Catalog Number: 14-5788

Clone: 6D4

Concentration: 0.5 mg/ml

Host/Isotype: Mouse IgG2a,  $\kappa$

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

### Description

The 6D4 monoclonal antibody reacts with the human major histocompatibility complex (MHC) class I chain-related (MIC), MICA and MICB proteins. MICA and MICB are related proteins of 83% amino acid similarity, and show homology with classical human leukocyte antigen (HLA) molecules. The structure of MICA and MICB are similar to classical HLA class I chains, however they do not bind  $\beta$ 2 microglobulin or bind peptide typical of HLA class I. MICA and MICB are expressed on the cell surface of endothelial cells, fibroblasts, gastric epithelium and PHA-stimulated T cells, and act as a ligand for NKG2D expressed on the surface of NK cells,  $\gamma\delta$  T cells and  $\alpha\beta$  CD8<sup>+</sup> T cells. There is evidence to suggest that human cytomegalovirus (HCMV) subverts NK cell detection by inhibiting the function of MICB. Furthermore, MICA and MICB expression has been detected in several epithelial tumours isolated from breast, lung, ovary, prostate, colon and kidney.

### Applications Reported

This 6D4 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistochemical staining. (Please use Functional Grade purified 6D4, cat. 16-5788, in functional assays.)

### Applications Tested

This 6D4 antibody has been tested by flow cytometric analysis of HeLa cells. This can be used at less than or equal to 0.5  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

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Edelmann W, Zervas M, et al. 1996. Neuronal abnormalities in microtubule-associated protein 1B mutant mice. *Proc Natl Acad Sci U S A*. 93(3):1270-5. (IHC frozen, PubMed)

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Groh V, Rhinehart R, et al. 1999. Broad tumor-associated expression and recognition by tumor-derived gamma delta T cells of MICA and MICB. Proc Natl Acad Sci U S A. 96(12):6879-84. (IHC frozen and paraffin, PubMed)

Related Products

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC

12-4317 Streptavidin PE

13-4013 Anti-Mouse IgG Biotin (Polyclonal)

14-4724 Mouse IgG2a K Isotype Control Purified

17-4317 Streptavidin APC

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