

APC anti-human MICA/MICB

Catalog # / Size: 2204535 / 25 tests
2204540 / 100 tests

Clone: 6D4

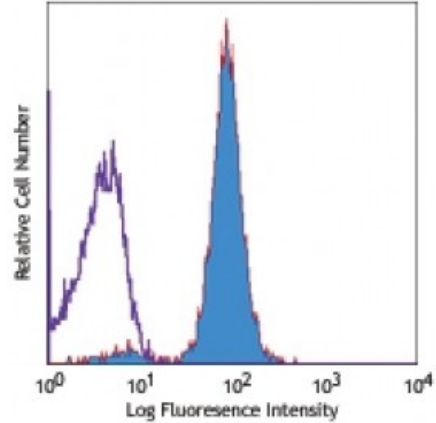
Isotype: Mouse IgG2a, κ

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human Hela cell line stained with 6D4 APC

Applications:

- Applications:** Flow Cytometry
- Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
- Application Notes:** Additional reported (for the relevant formats) applications include: immunohistochemistry^{2,3,5} of acetone-fixed frozen sections and formalin-fixed paraffin-embedded tissue sections, immunoprecipitation⁷, and blocking^{2,3} of MIC mediated cytotoxicity. The LEAF™ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 320910).
- Application References:**
 1. Groh V, *et al.* 1999. *Science* 279:1737.
 2. Groh V, *et al.* 1999. *Proc. Natl. Acad. Sci. USA.* 96:6879.
 3. Groh V, *et al.* 2001. *Nature Immunol.* 2:255.
 4. Li Z, *et al.* 2000. *Immunogenetics* 51:246.
 5. Park EJ, *et al.* 2003. *J. Immunol.* 171:4131.
 6. Jinushi M, *et al.* 2003. *J. Immunol.* 171:5423.
 7. Wu J, *et al.* 2003. *J. Immunol.* 170:4196.
 8. Watanbe M, *et al.* 2014. *Int Immunol.* [PubMed](#)

Description: 6D4 antibody reacts with a common epitope of the human nonclassical MHC class I chain-related protein A (MICA) and B (MICB), also known as PERB11.1 and PERB11.2. The MIC gene is located in MHC class I region. MICA/B are 65-75 kD stress-inducible glycoproteins with highly polymorphic. They are MHC class I-like transmembrane molecules that do not associate β 2-microglobulin and do not present peptides. MICA and MICB share 85% identity, and are mainly expressed on Intestinal epithelial cells, epithelial tumor cells, endothelial cells, fibroblasts, and IFN- α -stimulated dendritic cells. MIC molecules bind NKG2D, an activating receptor, and induce activation of NK cells, and subset of CD8⁺ α/β T cells and γ/δ T cells, as well as suppression of T cell proliferation. MICA/B recognition is

involved in the regulation of tumor surveillance, viral infection and autoimmune diseases. The 6D4 antibody is able to block MIC mediated cytotoxicity.

**Antigen
References:**

1. Groh V, *et al.* 1996. *Proc. Natl. Acad. Sci. USA.* 93:12445.
2. Groh V, *et al.* 1999. *Proc. Natl. Acad. Sci. USA.* 96:6879.
3. Jinushi M, *et al.* 2003. *J. Immunol.* 170:1249.
4. Kriegesk