

PerCP/Cy5.5 anti-human MICA/MICB

Catalog # / Size: 2204580 / 100 tests
2204575 / 25 tests

Clone: 6D4

Isotype: Mouse IgG2a, κ

Reactivity: Human

Concentration: Lot-specific

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 μL per million cells or 5 μL per 100 μL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

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/ μg , Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 320910).

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.