

**PerCP/Cy5.5 anti-human  $\beta$ 2-microglobulin**

**Catalog # / Size:** 2181580 / 100 tests  
2181575 / 25 tests

**Clone:** 2M2

**Isotype:** Mouse IgG1,  $\kappa$

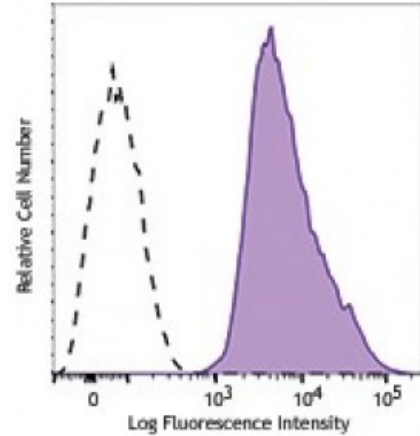
**Immunogen:** Purified human  $\beta$ 2-microglobulin

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

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

**Concentration:** 0.2



Human peripheral blood lymphocytes were stained with anti-human  $\beta$ 2-microglobulin (clone 2M2) PerCP/Cy5.5 (filled histogram), or mouse IgG1,  $\kappa$  PerCP/Cy5.5 isotype control (open histogram).

**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 microL per million cells or 5 microL per 100 microL 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 applications (for the relevant formats) include: Western blotting, and ELISA.

- Application References:**
1. Meissner TB, *et al.* 2010. *Proc Natl Acad Sci USA*. [PubMed](#)
  2. Rizvi SM, *et al.* 2011. *J. Immunol.* 186:2309. [PubMed](#)
  3. Meissner TB, *et al.* 2012. *J Immunol.* 188:4951. [PubMed](#).

**Description:**  $\beta$ 2-microglobulin ( $\beta$ 2M) is a 12 kD nonpolymorphic Ig like protein. It is a non-membrane-anchored glycoprotein and is noncovalently associated with 39-44 kD polymorphic heavy chains of MHC class I molecules to form HLA class I antigen complex. In association with HLA class I,  $\beta$ 2M is expressed on all leukocytes, platelets, endothelial cells, and epithelial cells.  $\beta$ 2M plays an essential role both in governing MHC class I molecules stability and in promoting antigen binding and presenting the antigen to CD3/TCR complex of CD8<sup>+</sup> T cells.

- Antigen References:**
1. Engelhard VH. 1994. *Curr. Opin. Immunol.* 6:13.
  2. Williams DB, *et al.* 1989. *J. Immunol.* 142:2796.
  3. Danliczyk UG and TL. Delovitch. 1994. *J. Immunol.* 153:3533.
  4. Williams A, *et al.* 2002.