

# Product Data Sheet

## Pacific Blue™ anti-human $\beta$ 2-microglobulin

**Catalog # / Size:** 316310 / 100  $\mu$ g

**Clone:** 2M2

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

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

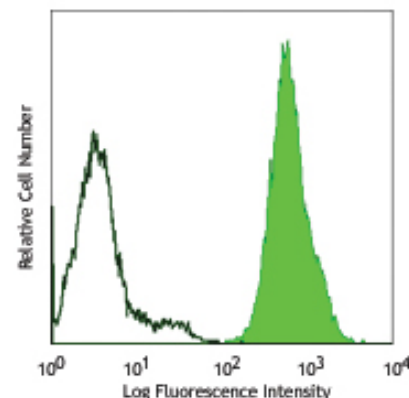
**Reactivity:** Human, **Cross-Reactivity:** Swine (Pig, Porcine)

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

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood lymphocytes stained with 2M2 Pacific Blue™

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq 1.0$   $\mu$ g per million cells in 100  $\mu$ l volume or 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** Additional reported applications (for the relevant formats) include: Western blotting and ELISA.

**Application References:** 1. Ozeki M, *et al.* 2008. *J. Leukocyte Biol.* 84:769. 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 Delovitch TL. 1994. *J. Immunol.* 153:3533.  
 4. Williams A, *et al.* 2002. *Tissue Antigens* 59:3.

### Related Products:

**Product**  
 Pacific Blue™ Mouse IgG1,  $\kappa$  Isotype Ctrl  
 Cell Staining Buffer  
 RBC Lysis Buffer (10X)  
 Human TruStain FcX™ (Fc Receptor Blocking Solution)

**Clone**  
 MOPC-21

**Application**  
 FC, ICFC  
 FC, ICC, ICFC  
 FC, ICFC  
 FC, ICC, ICFC



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