

APC/Fire™ 750 anti-human β 2-microglobulin Antibody

Catalog# / Size	316313 / 25 tests 316314 / 100 tests
Clone	2M2
Regulatory Status	RUO
Other Names	β 2M, β 2-M, beta2-microglobulin b2-M, b2M
Isotype	Mouse IgG1, κ
Description	β 2-microglobulin (β 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, β 2M is expressed on all leukocytes, platelets, endothelial cells, and epithelial cells. β 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 ⁺ T cells.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon, Cynomolgus, Rhesus, Pig
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Purified human β 2-microglobulin
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood. * APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.
Application Notes	Additional reported applications (for the relevant formats) include: Western blotting, and ELISA.
Application References	<ol style="list-style-type: none">1. Meissner TB, <i>et al.</i> 2010. <i>Proc Natl Acad Sci USA</i>. PubMed2. Rizvi SM, <i>et al.</i> 2011. <i>J. Immunol.</i> 186:2309. PubMed3. Meissner TB, <i>et al.</i> 2012. <i>J Immunol.</i> 188:4951. PubMed.
RRID	AB_2632825 (BioLegend Cat. No. 316313) AB_2632826 (BioLegend Cat. No. 316314)

Antigen Details

Structure	Nonpolymorphic Ig like structure, noncovalently associated with heavy chain of MHC class I molecules, 12 kD
------------------	---

Distribution	Leukocytes, platelets, endothelial cells, epithelial cells
Function	Govern MHC class I molecule stability, promote MHC class I molecules binding and presenting peptide antigens to CD8 ⁺ T cells
Ligand/Receptor	CD3/TCR complex, CD8
Cell Type	Endothelial cells, Epithelial cells, Leukocytes, Platelets
Biology Area	Immunology
Molecular Family	MHC Antigens
Antigen References	<ol style="list-style-type: none"> 1. Engelhard VH. 1994. <i>Curr. Opin. Immunol.</i> 6:13. 2. Williams DB, <i>et al.</i> 1989. <i>J. Immunol.</i> 142:2796. 3. Danliczyk UG and TL. Delovitch. 1994. <i>J. Immunol.</i> 153:3533. 4. Williams A, <i>et al.</i> 2002. <i>Tissue Antigens</i> 59:3.
Gene ID	567

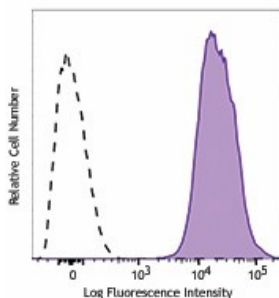
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-human β 2-microglobulin, FITC anti-human β 2-microglobulin, PE anti-human β 2-microglobulin, Biotin anti-human β 2-microglobulin, APC anti-human β 2-microglobulin, HRP anti-human β 2-microglobulin, PE/Cyanine7 anti-human β 2-microglobulin, APC/Fire™ 750 anti-human β 2-microglobulin, PerCP/Cyanine5.5 anti-human β 2-microglobulin, PE/Dazzle™ 594 anti-human β 2-microglobulin, TotalSeq™-A0057 anti-human β 2-microglobulin, TotalSeq™-C0057 anti-human β 2-microglobulin, TotalSeq™-B0057 anti-human β 2-microglobulin

Product Data



Human peripheral blood lymphocytes were stained with anti-human β 2-microglobulin (clone 2M2) APC/Fire™ 750 (filled histogram), or mouse IgG1, κ APC/Fire™ 750 isotype control (open histogram).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587