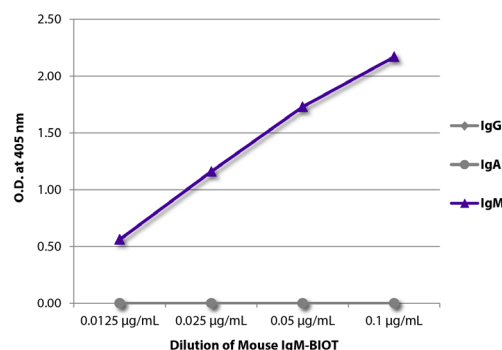




## Mouse IgM Isotype Control

Cat. No.	Format	Size
0101-01	Purified (UNLB)	1.0 mg
0101-02	Fluorescein (FITC)	100 tests
0101-08	Biotin (BIOT)	0.5 mg
0101-09	R-phycoerythrin (PE)	100 tests
0101-11	Allophycocyanin (APC)	100 tests
0101-13	Spectral Red® (SPRD)	100 tests
0101-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
0101-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	100 tests
0101-30	Alexa Fluor® 488 (AF488)	100 tests



ELISA plate was coated with Goat Anti-Mouse IgG, Human ads-UNLB (SB Cat. No. 1030-01), Goat Anti-Mouse IgA-UNLB (SB Cat. No. 1040-01), and Goat Anti-Mouse IgM, Human ads-UNLB (SB Cat. No. 1020-01). Serially diluted Mouse IgM-BIOT (SB Cat. No. 0101-08) was captured followed by Streptavidin-HRP (SB Cat. No. 7100-05) and quantified.

## Overview

<b>Clone</b>	11E10
<b>Isotype</b>	Mouse IgM $\lambda$
<b>Specificity</b>	Lipopolysaccharide

## Applications

FC – Quality tested <sup>17-19</sup>  
 ELISA – Quality tested <sup>1-13</sup>  
 FLISA – Quality tested  
 IHC-FS – Reported in literature <sup>14,15</sup>  
 IHC-PS – Reported in literature <sup>16</sup>  
 Block – Reported in literature <sup>6</sup>  
*In vitro* control – Reported in literature <sup>20-22</sup>

## Working Dilutions

<b>ELISA</b>	Purified (UNLB) antibody	$\leq 1 \mu\text{g/mL}$
	BIOT conjugate	1:5,000 – 1:20,000
<b>FLISA</b>	FITC and AF488	1:100 – 1:400
	PE and APC	$\leq 1 \mu\text{g/mL}$
<b>Flow Cytometry</b>	Purified (UNLB) antibody	$\leq 1 \mu\text{g}/10^6 \text{ cells}$
	BIOT conjugate	$\leq 1 \mu\text{g}/10^6 \text{ cells}$
	FITC, PE, APC, SPRD, PE/CY7, and AF488 conjugates	$10 \mu\text{L}/10^6 \text{ cells}$
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 $\mu\text{L}$ .	
<b>Other Applications</b>	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

**For Research Use Only. Not for Diagnostic or Therapeutic Use.**

## Handling and Storage

- The purified (UNLB) antibody is supplied as 1.0 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added.* Store at 2-8°C.
- The fluorescein (FITC) and Alexa Fluor® 488 (AF488) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) and R-phycoerythrin-Cyanine 7 (PE/CY7) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

## Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

## References

1. Oliver AM, Martin F, Kearney JF. IgM<sup>high</sup>CD21<sup>high</sup> lymphocytes enriched in the splenic marginal zone generate effector cells more rapidly than the bulk of follicular B cells. *J Immunol.* 1999;162:7198-207. (ELISA)
2. Beger E, Deocharan B, Edelman M, Erlich B, Gu Y, Puterman C. A peptide DNA surrogate accelerates autoimmune manifestations and nephritis in lupus-prone mice. *J Immunol.* 2002;168:3617-26. (ELISA)
3. Ait-Azzouzene D, Verkoczy L, Duong B, Skog P, Gavin AL, Nemazee D. Split tolerance in peripheral B cell subsets in mice expressing a low level of Igκ-reactive ligand. *J Immunol.* 2006;176:939-48. (ELISA)
4. Genestier L, Taillardet M, Mondiere P, Gheit H, Bella C, Defrance T. TLR agonists selectively promote terminal plasma cell differentiation of B cell subsets specialized in thymus-independent responses. *J Immunol.* 2007;178:7779-86. (ELISA)
5. Wang Y, Diamond B. B cell receptor revision diminishes the autoreactive B cell response after antigen activation in mice. *J Clin Invest.* 2008;118:2896-907. (ELISA)
6. Huang L, Adachi T, Shimizu Y, Goto Y, Toyama J, Tanaka H, et al. Characterization of lectin isolated from *Momordica charantia* seed as a B cell activator. *Immunol Lett.* 2008;121:148-56. (ELISA, Block)
7. Côté-Real J, Rodo J, Almeida P, Garcia J, Coutinho A, Demengeot J, et al. Irf4 is a positional and functional candidate gene for the control of serum IgM levels in the mouse. *Genes Immun.* 2009;10:93-9. (ELISA)
8. Patterson HC, Kraus M, Wang D, Shahsafaei A, Henderson JM, Seagal J, et al. Cytoplasmic Igα serine/threonines fine-tune Ig α tyrosine phosphorylation and limit bone marrow plasma cell formation. *J Immunol.* 2011;187:2853-8. (ELISA)
9. Szymczak WA, Davis MJ, Lundy SK, Dufaud C, Olszewski M, Pirofski L. X-linked immunodeficient mice exhibit enhanced susceptibility to *Cryptococcus neoformans* infection. *Mbio.* 2013;4(4): e00265-13. (ELISA)
10. Alsadeq A, Hobeika E, Medgyesi D, Kläsener K, Reth M. The role of the Syk/Shp-1 kinase-phosphatase equilibrium in B cell development and signaling. *J Immunol.* 2014;193:268-76. (ELISA)
11. Rosenbaum M, Andreani V, Kapoor T, Herp S, Flach H, Duchniewicz M, et al. MZB1 is a GRP94 cochaperone that enables proper immunoglobulin heavy chain biosynthesis upon ER stress. *Genes Dev.* 2014;28:1165-78. (ELISA)
12. Vogelzang A, McGuire HM, Liu SM, Gloss B, Mercado K, Earls P, et al. IL-21 contributes to fatal inflammatory disease in the absence of Foxp3<sup>+</sup> T regulatory cells. *J Immunol.* 2014;192:1404-14. (ELISA)
13. John S, Russell L, Chin SS, Luo W, Oshima R, Garrett-Sinha LA. Transcription factor Ets1, but not the closely related factor Ets2, inhibits antibody-secreting cell differentiation. *Mol Cell Biol.* 2014;34:522-32. (ELISA)
14. Nesse W, Westra J, van der Wal JE, Abbas F, Nicholas AP, Vissink A, et al. The periodontium of periodontitis patients contains citrullinated proteins which may play a role in ACPA (anti-citrullinated protein antibody) formation. *J Clin Periodontol.* 2012;39:599-607. (IHC-FS)
15. Kiekens RC, Thepen T, Bihari IC, Knol EF, Van De Winkel JG, Buijnzeel-Koomen CA. Expression of Fc receptors for IgG during acute and chronic cutaneous inflammation in atopic dermatitis. *Br J Dermatol.* 2000;142:1106-13. (IHC-FS)
16. Dadachova E, Nosanchuk JD, Shi L, Schweitzer AD, Frenkel A, Nosanchuk JS, et al. Dead cells in melanoma tumors provide abundant antigen for targeted delivery of ionizing radiation by a mAb to melanin. *Proc Natl Acad Sci USA.* 2004;101:14865-70. (IHC-PS)
17. Mierke CT, Ballmaier M, Werner U, Manns MP, Welte K, Bischoff SC. Human endothelial cells regulate survival and proliferation of human mast cells. *J Exp Med.* 2000;192:801-11. (FC)
18. Cheng J, Hylander BL, Baer MR, Chen X, Repasky EA. Multiple mechanisms underlie resistance of leukemia cells to Apo2 Ligand/TRAIL. *Mol Cancer Ther.* 2006;5:1844-53. (FC)
19. Nguyen TT, Elsner RA, Baumgarth N. Natural IgM prevents autoimmunity by enforcing B cell central tolerance induction. *J Immunol.* 2015;194:1489-1502. (FC)
20. Pedersen ED, Aass HC, Rootwelt T, Fung M, Lambiris JD, Molnes TE. CD59 efficiently protects human NT2-N neurons against complement-mediated damage. *Scand J Immunol.* 2007;66:345-51. (*In vitro* control)
21. Poe JC, Wagner DJ Jr, Miller RW, Stout RD, Suttles J. IL-4 and IL-10 modulation of CD40-mediated signaling of monocyte IL-1β synthesis and rescue from apoptosis. *J Immunol.* 1997;159:846-52. (*In vitro* control)
22. Dadachova E, Howell RW, Bryan RA, Frenkel A, Nosanchuk JD, Casadevall A. Susceptibility of the human pathogenic fungi *Cryptococcus neoformans* and *Histoplasma capsulatum* to γ-radiation versus radioimmunotherapy with α- and β-emitting radioisotopes. *J Nucl Med.* 2004;45:313-20. (*In vitro* control)

Spectral Red® is a registered trademark of Southern Biotechnology Associates, Inc.

Spectral Red® is a PE/CY5 tandem conjugate.

Cy™ is a trademark of Cytiva or one of its subsidiaries.

Alexa Fluor® 488, 647, 700 and Pacific Blue™ are provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Southern Biotechnology Associates, Inc., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

TB0101

28-Aug-23

**Corporate Offices:** 160 Oxmoor Blvd • Birmingham, AL 35209 • USA **Mailing Address:** P.O. Box 26221 • Birmingham, AL 35260 • USA

**Tel:** 205.945.1774 • U.S. and Canada: 800.722.2255 • **Fax:** 205.945.8768

**Email:** [info@southernbiotech.com](mailto:info@southernbiotech.com) • **Website:** [www.southernbiotech.com](http://www.southernbiotech.com)