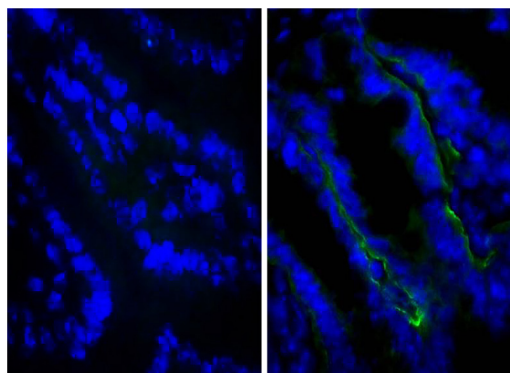




## Rat IgG<sub>2a</sub> Isotype Control

Cat. No.	Format	Size
0117-01	Purified (UNLB)	0.5 mg
0117-02	Fluorescein (FITC)	0.5 mg
0117-08	Biotin (BIOT)	0.5 mg
0117-09	R-phycoerythrin (PE)	0.1 mg
0117-10	R-phycoerythrin-Texas Red <sup>®</sup> (PE/TXRD)	0.1 mg
0117-11	Allophycocyanin (APC)	0.1 mg
0117-12	Cyanine 3 (CY3)	0.1 mg
0117-13	Spectral Red <sup>®</sup> (SPRD)	0.1 mg
0117-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
0117-15	Cyanine 5 (CY5)	0.1 mg
0117-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg
0117-18	Allophycocyanin-Cyanine 5.5 (APC/CY5.5)	0.1 mg
0117-19	Allophycocyanin-Cyanine 7 (APC/CY7)	0.1 mg
0117-26	Pacific Blue <sup>™</sup> (PACBLU)	0.1 mg
0117-27	Alexa Fluor <sup>®</sup> 700 (AF700)	0.1 mg
0117-30	Alexa Fluor <sup>®</sup> 488 (AF488)	0.1 mg
0117-31	Alexa Fluor <sup>®</sup> 647 (AF647)	0.1 mg



Frozen BALB/c mouse intestine tissue was stained with Rat IgG<sub>2a</sub>-UNLB isotype control (SB Cat. No. 0117-01; left) and Rat Anti-Mouse CD104-UNLB (SB Cat. No. 1855-01; right) followed by Goat Anti-Rat IgG(H+L), Mouse ads-BIOT (SB Cat. No. 3050-08), Streptavidin-FITC (SB Cat. No. 7100-02), and DAPI.

### Overview

<b>Clone</b>	KLH/G2a-1-1
<b>Isotype</b>	Rat IgG <sub>2a</sub> k
<b>Specificity</b>	KLH

### Applications

FC – Quality tested <sup>1-7</sup>  
 ELISA – Quality tested  
 FLISA – Quality tested  
 IHC-FS – Reported in literature <sup>8</sup>  
 IHC-PS <sup>14</sup>  
 IP – Reported in literature <sup>9</sup>  
 Block – Reported in literature <sup>10</sup>  
*In vitro* control – Reported in literature <sup>11</sup>  
*In vivo* control – Reported in literature <sup>12,13</sup>

### Working Dilutions

<b>Flow Cytometry</b>	FITC, BIOT, CY3, PACBLU, and AF488 conjugates	≤ 1 µg/10 <sup>6</sup> cells
	PE, PE/TXRD, APC, SPRD, CY5, PE/CY7, APC/CY5.5, APC/CY7, AF647 and AF700 conjugates	≤ 0.2 µg/10 <sup>6</sup> cells

For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL

**Other Applications** 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 0.5 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) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- The Alexa Fluor<sup>®</sup> 488 (AF488), Alexa Fluor<sup>®</sup> 647 (AF647), Alexa Fluor<sup>®</sup> 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 0.1 mg in 0.2 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 0.1 mg 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<sup>®</sup> (SPRD), R-phycoerythrin-Texas Red<sup>®</sup> (PE/TXRD), R-phycoerythrin-Cyanine 7 (PE/CY7), allophycocyanin-Cyanine 5.5 (APC/CY5.5) and allophycocyanin-Cyanine 7 (APC/CY7) conjugates are supplied as 0.1 mg 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. **Aliquot and store at or below -20°C.**
- The Cyanine 5 (CY5) and Cyanine 3 (CY3) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- 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. Welner R, Swett DJ, Pelsue SC. Age-related loss of bone marrow pre-B- and immature B-lymphocytes in the autoimmune-prone flaky skin mutant mice. *Autoimmunity*. 2005;38:399-408. (FC)
2. Gillan V, Devaney E. Regulatory T cells modulate Th2 responses induced by *Brugia pahangi* third-stage larvae. *Infect Immun*. 2005;73:4034-42. (FC)
3. Friesen C, Glattig G, Koop B, Schwarz K, Morgenstern A, Apostolidis C, et al. Breaking chemoresistance and radioresistance with [<sup>213</sup>Bi]anti-CD45 antibodies in leukemia cells. *Cancer Res*. 2007;67:1950-8. (FC)
4. Gillan V, Lawrence RA, Devaney E. B cells play a regulatory role in mice infected with the L3 of *Brugia pahangi*. *Int Immunol*. 2005;17:373-82. (FC)
5. Chu VT, Fröhlich A, Steinhauser G, Scheel T, Roch T, Fillatreau S, et al. Eosinophils are required for the maintenance of plasma cells in the bone marrow. *Nat Immunol*. 2011;12:151-60. (FC)
6. Benhamron S, Reiner I, Zcharia E, Atallah M, Grau A, Vlodavsky I, et al. Dissociation between mature phenotype and impaired transmigration in dendritic cells from heparanase-deficient mice. *PLoS One*. 2012;7(5):e35602. (FC)
7. Berge T, Grønningsæter IH, Lovik KB, Abrahamsen G, Granum S, Sundvold-Gjerstad V, et al. SH2D2A modulates T cell mediated protection to a B cell derived tumor in transgenic mice. *PLoS One*. 2012;7(10):e48239. (FC)
8. Løvås T, Bruusgaard JC, Øynebråten I, Gundersen K, Bogen B. DNA vaccines: MHC II-targeted vaccine protein produced by transfected muscle fibres induces a local inflammatory cell infiltrate in mice. *PLoS One*. 2014;9(10):e108069. (IHC-FS)
9. 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. (IP)
10. Talkington J, Nickell SP. Role of Fc gamma receptors in triggering host cell activation and cytokine release by *Borrelia burgdorferi*. *Infect Immun*. 2001;69:413-9. (Block)
11. Mayo L, Jacob-Hirsch J, Amariglio N, Rechavi G, Moutin M, Lund FE, et al. Dual role of CD38 in microglial activation and activation-induced cell death. *J Immunol*. 2008;181:92-103. (*In vitro* control)
12. Kaplan RN, Riba RD, Zacharoulis S, Bramley AH, Vincent L, Costa C, et al. VEGFR1-positive haematopoietic bone marrow progenitors initiate the pre-metastatic niche. *Nature*. 2005;438:820-7. (*In vivo* control)
13. Etich J, Bergmeier V, Frie C, Kreft S, Bengestrate L, Eming S, et al. PECAM1<sup>+</sup>/Sca1<sup>+</sup>/CD38<sup>+</sup> vascular cells transform into myofibroblast-like cells in skin wound repair. *PLoS One*. 2013;8(1):e53262. (*In vivo* control)
14. SouthernBiotech unpublished data (IHC-PS)

Texas Red<sup>®</sup> is a registered trademark of Molecular Probes, Inc.

Spectral Red<sup>®</sup> is a registered trademark of Southern Biotechnology Associates, Inc.

Spectral Red<sup>®</sup> is a PE/CY5 tandem conjugate.

Cy<sup>®</sup> is a registered trademark of GE Healthcare.

Alexa Fluor<sup>®</sup> 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.