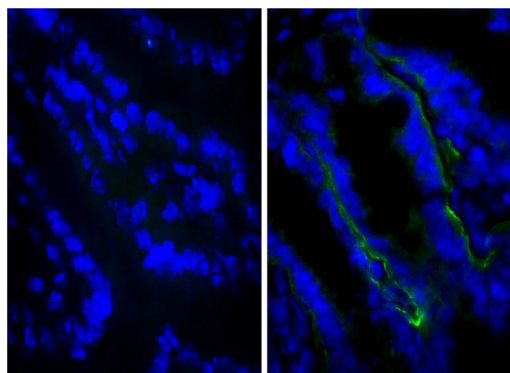




## Rat IgG<sub>2a</sub> Isotype Control

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® (PE/TXRD)	0.1 mg
0117-11	Allophycocyanin (APC)	0.1 mg
0117-12	Cyanine 3 (CY3)	0.1 mg
0117-13	Spectral Red® (SPRD)	0.1 mg
0117-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
0117-15	Cyanine 5 (CY5)	0.1 mg
0117-16	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	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™ (PACBLU)	0.1 mg
0117-27	Alexa Fluor® 700 (AF700)	0.1 mg
0117-30	Alexa Fluor® 488 (AF488)	0.1 mg
0117-31	Alexa Fluor® 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/CY5.5, 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

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- 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 5.5 (PE/CY5.5), 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

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

## References

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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, Glatting 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, Lovvik 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)

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