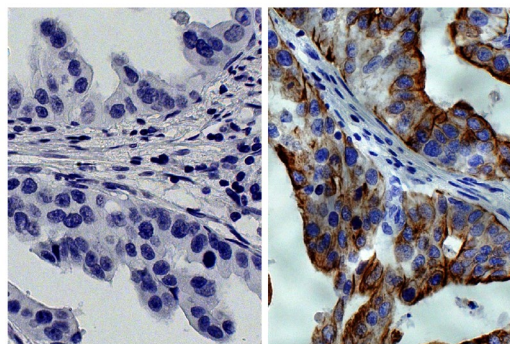




Mouse IgG_{2a} Isotype Control

Cat. No.	Format	Size
0103-01	Purified (UNLB)	1.0 mg
0103-02	Fluorescein (FITC)	100 tests
0103-04	Alkaline Phosphatase (AP)	1.0 mL
0103-05	Horseradish Peroxidase (HRP)	1.0 mL
0103-08	Biotin (BIOT)	0.5 mg
0103-09	R-phycoerythrin (PE)	100 tests
0103-10	R-phycoerythrin-Texas Red® (PE/TXRD)	100 tests
0103-11	Allophycocyanin (APC)	100 tests
0103-13	Spectral Red® (SPRD)	100 tests
0103-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
0103-15	Cyanine 5 (CY5)	100 tests
0103-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	100 tests
0103-18	Allophycocyanin-Cyanine 5.5 (APC/CY5.5)	100 tests
0103-19	Allophycocyanin-Cyanine 7 (APC/CY7)	100 tests
0103-26	Pacific Blue™ (PACBLU)	100 tests
0103-27	Alexa Fluor® 700 (AF700)	100 tests
0103-30	Alexa Fluor® 488 (AF488)	100 tests
0103-31	Alexa Fluor® 647 (AF647)	100 tests



Paraffin embedded human gastric cancer tissue was stained with Mouse IgG_{2a}-HRP isotype control (SB Cat. No. 0103-05; left) and Mouse Anti-Cytokeratin 8-HRP (SB Cat. No. 10080-05; right) followed by DAB and hematoxylin.

Overview

Clone	HOPC-1
Isotype	Mouse IgG _{2a} λ
Specificity	Unknown

Applications

FC – Quality tested ⁶⁻¹²
 ELISA – Quality tested ¹⁻⁵
 FLISA – Quality tested
 IHC-FS – Reported in literature ^{13,14}
 IHC-PS ²⁰
 ICC – Reported in literature ^{15,21}
 WB – Reported in literature ¹⁷
 IP – Reported in literature ^{15,16}
In vitro control – Reported in literature ^{7,8,17}
In vivo control – Reported in literature ^{17,18}

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 µg/10 ⁶ cells
	BIOT conjugate	≤ 1 µg/10 ⁶ cells
	FITC, PE, PE/TXRD, APC, SPRD, CY5, PE/CY7, APC/CY5.5, APC/CY7, PACBLU, AF488, AF647, and AF700 conjugates	10 µL/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	
ELISA	Purified (UNLB) antibody	1 - 5 µg/mL
	AP and HRP conjugates	1:2,000 – 1:4,000
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 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), Cyanine 5 (CY5), Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), Alexa Fluor® 700 (AF700), and Pacific Blue™ (PACBLU) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The alkaline phosphatase (AP) conjugate is supplied as 1.0 mL in a stock solution of 50 mM Tris/1 mM MgCl₂/50% glycerol, pH 8.0, containing NaN₃ as preservative. Store at 2-8°C or long-term at -20°C.
- The horseradish peroxidase (HRP) conjugate is supplied as 1.0 mL in a stock solution of 50% glycerol/50% PBS, pH 7.4. No preservative added. Store at 2-8°C or long-term at -20°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD), R-phycoerythrin-Texas Red® (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 100 tests in 1.0 mL of PBS/NaN₃ 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. Beger E, Deocharan B, Edelman M, Erlich B, Gu Y, Putterman C. A peptide DNA surrogate accelerates autoimmune manifestations and nephritis in lupus-prone mice. *J Immunol.* 2002;168:3617-26. (ELISA)
2. Wang J, Anders RA, Wu Q, Peng D, Cho JH, Sun Y, et al. Dysregulated LIGHT expression on T cells mediates intestinal inflammation and contributes to IgA nephropathy. *J Clin Invest.* 2004;113:826-35. (ELISA)
3. Patterson HC, Kraus M, Wang D, Shahsafari 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)
4. Kamphuis T, Meijerhof T, Stegmann T, Lederhofer J, Wilschut J, de Haan A. Immunogenicity and protective capacity of a virosomal respiratory syncytial virus vaccine adjuvanted with monophosphoryl lipid A in mice. *PLoS One.* 2012;7(5):e36812. (ELISA)
5. Faustino L, Fonseca DM, Florsheim EB, Resende RR, Lepique AP, Faquim-Mauro E, et al. Tumor necrosis factor-related apoptosis-inducing ligand mediates the resolution of allergic airway inflammation induced by chronic allergen inhalation. *Mucosal Immunol.* 2014;7:1199-208. (ELISA)
6. 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)
7. Annunziato F, Cosmi L, Liotta F, Lazzeri E, Manetti R, Vanini V, et al. Phenotype, localization, and mechanism of suppression of CD4⁺CD25⁺ human thymocytes. *J Exp Med.* 2002;196:379-87. (FC, *in vitro* control)
8. Cosmi L, Liotta F, Lazzeri E, Francalanci M, Angeli R, Mazzinghi B, et al. Human CD8⁺CD25⁺ thymocytes share phenotypic and functional features with CD4⁺CD25⁺ regulatory thymocytes. *Blood.* 2003;102:4107-14. (FC, *in vitro* control)
9. Charentantanakul W, Platt R, Roth JA. Effects of porcine reproductive and respiratory syndrome virus-infected antigen-presenting cells on T cell activation and antiviral cytokine production. *Viral Immunol.* 2006;19:646-61. (FC)
10. Crescioli C, Cosmi L, Borgogni E, Santarlasci V, Gelmini S, Sottili M, et al. Methimazole inhibits CXC chemokine ligand 10 secretion in human thyrocytes. *J Endocrinol.* 2007;195:145-55. (FC)
11. Wen K, Bui T, Li G, Liu F, Li Y, Kocher J, et al. Characterization of immune modulating functions of γδ T cell subsets in a gnotobiotic pig model of human rotavirus infection. *Comp Immunol Microbiol Infect Dis.* 2012;35:289-301. (FC)
12. Kroesen M, Nierkens S, Ansems M, Wassink M, Orentas RJ, Boon L, et al. A transplantable TH-MYC transgenic tumor model in C57Bl/6 mice for preclinical immunological studies in neuroblastoma. *Int J Cancer.* 2014;134:1335-45. (FC)
13. Chen M, Lam BK, Kanaoka Y, Nigrovic PA, Audoly LP, Austen KF, et al. Neutrophil-derived leukotriene B₄ is required for inflammatory arthritis. *J Exp Med.* 2006;203:837-42. (IHC-FS)
14. Balogh A, Pozsgay J, Matkó J, Dong Z, Kim CJ, Várkonyi T, et al. Placental protein 13 (PP13/galectin-13) undergoes lipid raft-associated subcellular redistribution in the syncytiotrophoblast in preterm preeclampsia and HELLP syndrome. *Am J Obstet Gynecol.* 2011;205:156e1-14. (IHC-FS)
15. Guimarães AJ, Hamilton AJ, de M Guedes HL, Nosanchuk JD, Zancopé-Oliveira RM. Biological function and molecular mapping of M antigen in yeast phase of *Histoplasma capsulatum*. *PLoS One.* 2008;3(10):e3449. (ICC, IP)
16. Lindner JM, Kayo H, Hedlund S, Fukuda Y, Fukao T, Nielsen PJ. Cutting edge: The transcription factor Bob1 counteracts B cell activation and regulates miR-146a in B cells. *J Immunol.* 2014;192:4483-6. (IP)
17. Lighvani S, Baik N, Diggs JE, Khaldoyanidi S, Farmer RJ, Miles LA. Regulation of macrophage migration by a novel plasminogen receptor Plg-R_{KT}. *Blood.* 2011;118:5622-30. (WB, *in vitro* control, *in vivo* control)
18. Smith MA, Weingarten RA, Russo LM, Ventura CL, O'Brien AD. Antibodies against hemolysin and cytotoxic necrotizing factor type 1 (CNF1) reduce bladder inflammation in a mouse model of urinary tract infection with toxigenic uropathogenic *Escherichia coli*. *Infect Immun.* 2015;83:1661-73. (*In vivo* control)
19. Xia Y, Janda A, Eryilmaz E, Casadevall A, Putterman C. The constant region affects antigen binding of antibodies to DNA by altering secondary structure. *Mol Immunol.* 2013;56:28-37. (Circular dichroism spectroscopy protein control)
20. SouthernBiotech published data (IHC-PS)
21. Pilling D, Tucker NM, Gomer RH. Aggregated IgG inhibits the differentiation of human fibrocytes. *J Leukoc Biol.* 2006;79:1242-51 (ICC)

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