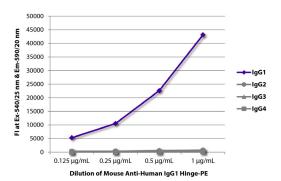
SouthernBiotech



Mouse Anti-Human IgG₁ Hinge

Cat. No.	Format	Size
9052-01	Purified (UNLB)	0.5 mg
9052-02	Fluorescein (FITC)	0.5 mg
9052-04	Alkaline Phosphatase (AP)	1.0 mL
9052-05	Horseradish Peroxidase (HRP)	1.0 mL
9052-08	Biotin (BIOT)	0.5 mg
9052-09	R-phycoerythrin (PE)	0.1 mg
9052-30	Alexa Fluor® 488 (AF488)	0.1 mg
9052-31	Alexa Fluor® 647 (AF647)	0.1 mg
9052-32	Alexa Fluor® 555 (AF555)	0.1 mg



FLISA plate was coated with purified human IgG1, IgG2, IgG3, and IgG4. Immunoglobulins were detected with serially diluted Mouse Anti-Human IgG1 Hinge-PE (SB Cat. No. 9052-09).

Overview

Clone 4E3

Isotype Mouse (BALB/c) $IgG_1\kappa$

Immunogen Unknown

Specificity Human IgG₁ Hinge; Mr 146 kDa

Applications

ELISA – Quality tested ^{1-7,9}

FLISA - Quality tested

FC – Reported in literature ¹³⁻¹⁵

IHC-PS – Reported in literature 8-10

WB - Reported in literature 11,12

Multiplex – Reported in literature ¹⁶⁻¹⁹

Sep – Reported in literature ²⁰

Purification – Reported in literature ²¹

Note – For direct immunostaining of IgG₁ positive cells in flow cytometry applications, clone HP6001 (SB Cat. No. 9054) is recommended

Working Dilutions

ELISA	Purified (UNLB) antibody	≤ 5 μg/mL
	AP conjugate	1:1,000 – 1:2,000
	HRP conjugate	1:2,000 - 1:8,000
	BIOT conjugate	1:5,000 — 1:10,000
FLISA	FITC, AF488, and AF555 conjugates	1:200 – 1:400
	PE and AF647 conjugates	≤ 1 μg/mL
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.

Email: info@southernbiotech.com • Website: www.southernbiotech.com

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/NaN3. Store at 2-8°C.
- The alkaline phosphatase (AP) conjugate is supplied as 1.0 mL of stock solution in 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 of stock solution in 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) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not** freeze!
- The Alexa Fluor[®] 488 (AF488), Alexa Fluor[®] 647 (AF647), and Alexa Fluor[®] 555 (AF555) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. 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 (M)SDS.

References

- 1. Whary MT, Sundina N, Bravo LE, Correa P, Quinones F, Caro F, et al. Intestinal helminthiasis in Colombian children promotes a Th2 response to Helicobacter pylori: possible implications for gastric carcinogenesis. Cancer Epidemiol Biomarkers Prev. 2005;14:1464-9. (ELISA)
- 2. Njoku DB, Mellerson JL, Talor MV, Kerr DR, Faraday NR, Outschoorn I, et al. Role of CYP2E1 immunoglobulin G4 subclass antibodies and complement in pathogenesis of idiosyncratic drug-induced hepatitis. Clin Vaccine Immunol. 2006;13:258-65. (ELISA)
- 3. Liu L, Chen M, Yu F, Zhao M, Wang H. IgG subclass distribution, affinity of anti-myeloperoxidase antibodies in sera from patients with Wegener's granulomatosis and microscopic polyangiitis. Nephrology. 2008;13:629-35. (ELISA)
- 4. Xu P, Cui Z, Chen M, Hellmark T, Zhao M. Comparison of characteristics of natural autoantibodies against myeloperoxidase and anti-myeloperoxidase autoantibodies from patients with microscopic polyangiitis. Rheumatology. 2011;50:1236-43. (ELISA)
- 5. Geisler WM, Morrison SG, Doemland ML, Iqbal SM, Su J, Mancevski A, et al. Immunoglobulin-specific responses to Chlamydia elementary bodies in individuals with and at risk for genital chlamydial infection. J Infect Dis. 2012;206:1836-43. (ELISA)
- 6. Shao C, Huo N, Zhao L, Gao Y, Fan X, Zheng Y, et al. The presence of thyroid peroxidase antibody of IgG2 subclass is a risk factor for thyroid dysfunction in chronic hepatitis C patients. Eur J Endocrinol. 2013;168:717-22. (ELISA)
- Haag S, Schneider N, Mason DE, Tuncel J, Andersson IE, Peters EC, et al. Identification of new citrulline-specific autoantibodies, which bind to human arthritic cartilage, by mass spectrometric analysis of citrullinated type II collagen. Arthritis Rheumatol. 2014;66:1440-9. (ELISA)
- 8. Qu Z, Liu G, Li J, Wu L, Tan Y, Zheng X, et al. Absence of glomerular IgG4 deposition in patients with membranous nephropathy may indicate malignancy. Nephrol Dial Transplant. 2012;27:1931-7. (IHC-PS)
- 9. Jia X, Hu S, Chen J, Qu Z, Liu G, Cui Z, et al. The clinical and immunological features of patients with combined anti-glomerular basement membrane disease and membranous nephropathy. Kidney Int. 2014;85:945-52. (ELISA, IHC-PS)
- Qu Z, Cui Z, Liu G, Zhao M. The distribution of IgG subclass deposition on renal tissues from patients with anti-glomerular basement membrane disease. BMC Immunol. 2013;14:19. (IHC-PS)
- 11. Bøe AS, Bredholt G, Knappskog PM, Hjelmervik TO, Mellgren G, Winqvist O, et al. Autoantibodies against 21-hydroxylase and side-chain cleavage enzyme in autoimmune Addison's disease are mainly immunoglobulin G1. Eur J Endocrinol. 2004;150:49-56. (WB)
- 12. Skorstad G, Hestvik AL, Torjesen P, Alvik K, Vartdal F, Vandvik B, et al. GAD65 IgG autoantibodies in stiff person syndrome: clonality, avidity and persistence. Eur J Neurol. 2008:15:973-80. (WB)
- 13. Wang M, Qiu Y, Wang X, Zhao F, Jin M, Xu M, et al. Role of HLA-G and NCR in protection of umbilical cord blood haematopoietic stem cells from NK cell mediated cytotoxicity. J Cell Mol Med. 2011;15:2040-5. (FC)
- 14. Gao B, Moore C, Porcheray F, Rong C, Abidoglu C, DeVito J, et al. Pretransplant IgG reactivity to apoptotic cells correlates with late kidney allograft loss. Am J Transplant. 2014;14:1581-91. (FC)
- 15. Toyoda C, Suzuki Y, Tsuneyama H, Onodera T, Masuno A, Yabe R, et al. Production of human monoclonal anti-Jk3, recognising an epitope including the Jk^a/Jk^b polymorphic site of the Kidd glycoprotein. Transfus Med. 2014;24:286-91. (FC)
- 16. Keynan Y, Bodnarchuk T, Wayne S, Li Y, Fowke KR. Evaluation of influenza-specific humoral response by microbead array analysis. Can J Infect Dis Med Microbiol. 2011;22:25-9. (Multiplex)
- 17. Kaneku H, O'Leary JG, Taniguchi M, Susskind BM, Terasaki PI, Klintmalm GB. Donor-specific human leukocyte antigen antibodies of the immunoglobulin G3 subclass are associated with chronic rejection and graft loss after liver transplantation. Liver Transpl. 2012;18:984-92. (Multiplex)
- 18. Lowe D, Higgins R, Zehnder D, Briggs DC. Significant IgG subclass heterogeneity in HLA-specific antibodies: Implications for pathogenicity, prognosis, and the rejection response. Hum Immunol. 2013;74:666-72. (Multiplex)
- rejection response. Hum Immunol. 2013;74:666-72. (Multiplex)

 19. Freitas MC, Rebellato LM, Ozawa M, Nguyen A, Sasaki N, Everly M, et al. The role of immunoglobulin-G subclasses and C1q in de novo HLA-DQ donor-
- specific antibody kidney transplantation outcomes. Transplantation. 2013;95:1113-9. (Multiplex)

 20. He B, Xu W, Santini PA, Polydorides AD, Chiu A, Estrella J, et al. Intestinal bacteria trigger T cell-independent immunoglobulin A₂ class switching by inducing epithelial-cell secretion of the cytokine APRIL. Immunity. 2007;26:812-26. (Sep)
- 21. Chmielewski M, Hombach AA, Abken H. CD28 cosignalling does not affect the activation threshold in a chimeric antigen receptor-redirected T-cell attack. Gene Ther. 2011;18:62-72. (Purification)

Alexa Fluor® 488, 647, and 555 are provided under an Intellectual property license from Life Technologies Corporation. 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 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 Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.

TB9052 01-Aug-17