

Mouse Immunoglobulin Panel

Cat. No.	Kit Format	Size
5300-01	Purified (UNLB) Immunoglobulins	0.1 mg each

Description

SouthernBiotech's Mouse Immunoglobulin Panel contains 0.1 mg of mouse IgA, mouse IgG₁, mouse IgG_{2a}, mouse IgG_{2b}, mouse IgG₃, and mouse IgM for use in immunoassays. The kit may be used as positive reference standards for isotyping and standards for quantitative studies of mouse immunoglobulins in samples such as serum, supernatant, feces, and ascites.

Applications

ELISA – Quality tested ¹⁻⁴⁴

Kit Components

- Purified (UNLB) Mouse IgA
- Purified (UNLB) Mouse IgG₁
- Purified (UNLB) Mouse IgG_{2a}
- Purified (UNLB) Mouse IgG_{2b}
- Purified (UNLB) Mouse IgG₃
- Purified (UNLB) Mouse IgM

Handling and Storage

- The purified (UNLB) immunoglobulins are supplied as 0.1 mg 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.
- Reagents are stable for the period shown on the label if stored as directed.

References

1. Nakagawa I, Takahashi I, Kiyono H, McGhee JR, Hamada S. Oral immunization with the B subunit of the heat-labile enterotoxin of Escherichia coli induces early Th1 and late Th2 cytokine expression in Peyer's patches. *J Infect Dis.* 1996;173:1428-36. (ELISA Standard - Serum & Feces)
2. Merrell K, Wells S, Henderson A, Gorman J, Alt F, Stall A, et al. The absence of the transcription activator TFE3 impairs activation of B cells in vivo. *Mol Cell Biol.* 1997;17:3335-44. (ELISA Standard - Serum & Supernatant)
3. Taylor R, Porakishvili N, De Souza JB, Playfair JH, Delves PJ, Lund T. DNA vaccination favours memory rather than effector B cell responses. *Clin Exp Immunol.* 1999;117:106-12. (ELISA Standard - Serum)
4. Tada Y, Nagasawa K, Ho A, Morito F, Koarada S, Ushiyama O, et al. Role of the costimulatory molecule CD28 in the development of lupus in MRL/lpr mice. *J Immunol.* 1999;163:3153-9. (ELISA Standard - Serum)
5. Kabra NH, Cado D, Winoto A. A tailless fas-FADD death-effector domain chimera is sufficient to execute Fas function in T cells but not B cells of MRL-lpr/lpr mice. *J Immunol.* 1999;162:2766-74. (ELISA Standard - Serum)
6. Kinoshita K, Tesch G, Schwarting A, Maron R, Sharpe AH, Kelley VR. Costimulation by B7-1 and B7-2 is required for autoimmune disease in MRL-Fas^{lpr} mice. *J Immunol.* 2000;164:6046-56. (ELISA Standard - Serum)
7. Test ST, Mitsuyoshi J, Connolly CC, Lucas AH. Increased immunogenicity and induction of class switching by conjugation of complement C3d to pneumococcal serotype 14 capsular polysaccharide. *Infect Immun.* 2001;69:3031-40 (ELISA Standard - Serum)
8. Kikuchi T, Hackett NR, Crystal RG. Cross-strain protection against clinical and laboratory strains of *Pseudomonas aeruginosa* mediated by dendritic cells genetically modified to express CD40 ligand and pulsed with specific strains of *Pseudomonas aeruginosa*. *Hum Gene Ther.* 2001;12:1251-63. (ELISA Standard - Serum)
9. Schmidt CS, Liu J, Zhang T, Song HY, Sandusky G, Mintze K, et al. Enhanced B cell expansion, survival, and humoral responses by targeting death receptor 6. *J Exp Med.* 2003;197:51-62. (ELISA Standard - Serum)
10. Stacy S, Infante AJ, Wall KA, Krolick K, Kraig E. Recall immune memory: a new tool for generating late onset autoimmune myasthenia gravis. *Mech Ageing Dev.* 2003;124:931-40. (ELISA Standard - Serum)
11. Ruzeck MC, Hawes M, Pratt B, McPherson J, Ledbetter S, Richards SM, et al. Minimal effects on immune parameters following chronic anti-TGF-β monoclonal antibody administration to normal mice. *Immunopharmacol Immunotoxicol.* 2003;25:235-57. (ELISA Standard - Serum)
12. Kuroda Y, Akaogi J, Nacionales DC, Wasdo SC, Szabo NJ, Reeves WH, et al. Distinctive patterns of autoimmune response induced by different types of mineral oil. *Toxicol Sci.* 2004;78:222-8. (ELISA Standard - Serum)
13. Kinoshita K, Yamagata T, Nozaki Y, Sugiyama M, Ikoma S, Funuchi M, et al. Blockade of IL-18 receptor signaling delays the onset of autoimmune disease in MRL-Fas^{lpr} mice. *J Immunol.* 2004;173:5312-8. (ELISA Standard - Serum)
14. Richards RL, Rao M, Vancott TC, Matyas GR, Birx DL, Alving CR. Liposome-stabilized oil-in-water emulsions as adjuvants: increased emulsion stability promotes induction of cytotoxic T lymphocytes against an HIV envelope antigen. *Immunol Cell Biol.* 2004;82:531-8. (ELISA Standard - Serum)
15. Sánchez MD, Pierson TC, McAllister D, Hanna SL, Puffer BA, Valentine LE, et al. Characterization of neutralizing antibodies to West Nile virus. *Virology.* 2005;336:70-82. (ELISA Standard - Purified Antibody)

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16. Test ST, Mitsuyoshi JK, Hu Y. Depletion of complement has distinct effects on the primary and secondary antibody responses to a conjugate of pneumococcal serotype 14 capsular polysaccharide and a T-cell-dependent protein carrier. *Infect Immun.* 2005;73:277-86. (ELISA Standard - Serum)
17. Coughlin JJ, Stang SL, Dower NA, Stone JC. RasGRP1 and RasGRP3 regulate B cell proliferation by facilitating B cell receptor-Ras signaling. *J Immunol.* 2005;175:7179-84. (ELISA Standard - Serum)
18. Guillaume V, Contamin H, Loth P, Grosjean I, Courbot MC, Deubel V, et al. Antibody prophylaxis and therapy against Nipah virus infection in hamsters. *J Virol.* 2006;80:1972-8. (ELISA Standard - Ascites)
19. Byrd W, Cassels FJ. The encapsulation of enterotoxigenic Escherichia coli colonization factor CS3 in biodegradable microspheres enhances the murine antibody response following intranasal administration. *Microbiology.* 2006;152:779-86. (ELISA Standard - Serum)
20. Wittman VP, Woodburn D, Nguyen T, Neethling FA, Wright S, Weidanz JA. Antibody targeting to a class I MHC-peptide epitope promotes tumor cell death. *J Immunol.* 2006;177:4187-95. (ELISA Standard - Supernatant)
21. Byrd W, Cassels FJ. Long-term systemic and mucosal antibody responses measured in BALB/c mice following intranasal challenge with viable enterotoxigenic Escherichia coli. *FEMS Immunol Med Microbiol.* 2006;46:262-8. (ELISA Standard - Serum)
22. Tada Y, Koarada S, Tomiyoshi Y, Morito F, Mitamura M, Haruta Y, et al. Role of inducible costimulator in the development of lupus in MRL/lpr mice. *Clin Immunol.* 2006;120:179-88. (ELISA Standard - Serum)
23. Shankar M, Nixon JC, Maier S, Workman J, Farris AD, Webb CF. Anti-nuclear antibody production and autoimmunity in transgenic mice that overexpress the transcription factor Bright. *J Immunol.* 2007;178:2996-3006. (ELISA Standard - Serum)
24. Tsuji M, Suzuki K, Kitamura H, Maruya M, Kinoshita K, Ivanov II, et al. Requirement for lymphoid tissue-inducer cells in isolated follicle formation and T cell-independent immunoglobulin A generation in the gut. *Immunity.* 2008;29:261-71. (ELISA Standard - Serum & Feces)
25. Weant AE, Michalek RD, Khan IU, Holbrook BC, Willingham MC, Grayson JM. Apoptosis regulators Bim and Fas function concurrently to control autoimmunity and CD8⁺ T cell contraction. *Immunity.* 2008;28:218-30. (ELISA Standard - Serum)
26. Bynoté KK, Hackenberg JM, Korach KS, Lubahn DB, Lane PH, Gould KA. Estrogen receptor- α deficiency attenuates autoimmune disease in (NZB x NZW)F₁ mice. *Genes Immun.* 2008;9:137-52. (ELISA Standard - Serum)
27. Finetti F, Pellegrini M, Ulivrieri C, Savino MT, Paccagnini E, Ginanneschi C, et al. The proapoptotic and antimitogenic protein p66SHC acts as a negative regulator of lymphocyte activation and autoimmunity. *Blood.* 2008;111:5017-27. (ELISA Standard - Serum)
28. Nixon JC, Ferrell S, Miner C, Oldham AL, Hochgeschwender U, Webb CF. Transgenic mice expressing dominant-negative bright exhibit defects in B1 B cells. *J Immunol.* 2008;181:6913-22. (ELISA Standard - Serum)
29. Hinman RM, Nichols WA, Diaz TM, Gallardo TD, Castrillon DH, Satterthwaite AB. Foxo3^{-/-} mice demonstrate reduced numbers of pre-B and recirculating B cells but normal splenic B cell sub-population distribution. *Int Immunol.* 2009;21:831-42. (ELISA Standard - Serum)
30. Savino MT, Ortensi B, Ferro M, Ulivrieri C, Fanigliulo D, Paccagnini E, et al. Rai acts as a negative regulator of autoimmunity by inhibiting antigen receptor signaling and lymphocyte activation. *J Immunol.* 2009;182:301-8. (ELISA Standard - Serum)
31. Staley EM, Schoeb TR, Lorenz RG. Differential susceptibility of P-glycoprotein deficient mice to colitis induction by environmental insults. *Inflamm Bowel Dis.* 2009;15:684-96. (ELISA Standard - Serum)
32. Cash H, Relle M, Menke J, Brochhausen C, Jones SA, Topley N, et al. Interleukin 6 (IL-6) deficiency delays lupus nephritis in MRL-Fas^{lpr} mice: the IL-6 pathway as a new therapeutic target in treatment of autoimmune kidney disease in systemic lupus erythematosus. *J Rheumatol.* 2010;37:60-70. (ELISA Standard - Serum)
33. Verma B, Hawkins OE, Neethling FA, Caseltine SL, Largo SR, Hildebrand WH, et al. Direct discovery and validation of a peptide/MHC epitope expressed in primary human breast cancer cells using a TCRm monoclonal antibody with profound antitumor properties. *Cancer Immunother.* 2010;59:563-73. (ELISA Standard - Supernatant)
34. Ohnmacht C, Schwartz C, Panzer M, Schiedewitz I, Naumann R, Voehringer D. Basophils orchestrate chronic allergic dermatitis and protective immunity against helminths. *Immunity.* 2010;33:364-74. (ELISA Standard - Serum)
35. Bohgaki T, Mozo J, Salmena L, Matysiak-Zablocki E, Bohgaki M, Sanchez O, et al. Caspase-8 inactivation in T cells increases necroptosis and suppresses autoimmunity in Bim^{-/-} mice. *J Cell Biol.* 2011;195:277-91. (ELISA Standard - Serum)
36. Webb CF, Bryant J, Popowski M, Allred L, Kim D, Harriss J, et al. The ARID family transcription factor bright is required for both hematopoietic stem cell and B lineage development. *Mol Cell Biol.* 2011;31:1041-53. (ELISA Standard - Serum)
37. Bohgaki T, Bohgaki M, Cardoso R, Panier S, Zeegers D, Li L, et al. Genomic instability, defective spermatogenesis, immunodeficiency, and cancer in a mouse model of the RIDDLE syndrome. *PLoS Genet.* 2011;7(4):e1001381. (ELISA Standard - Serum & Supernatant)
38. Tada Y, Kondo S, Aoki S, Koarada S, Inoue H, Suematsu R, et al. Interferon regulatory factor 5 is critical for the development of lupus in MRL/lpr mice. *Arthritis Rheum.* 2011;63:738-48. (ELISA Standard - Serum)
39. Sega M, Zanetti C, Rizzi C, Olivier M, Chignola R, Zoccatelli G. Production and characterisation of monoclonal antibodies for the quantification of potentially allergenic xylanase from Aspergillus niger. *Food Addit Contam Part A Chem Anal Control Expo Risk Assess.* 2012;29:1356-63. (ELISA Standard - Supernatant)
40. Park KS, Bayles I, Szlachta-McGinn A, Paul J, Boiko J, Santos P, et al. Transcription elongation factor ELL2 drives Ig secretory-specific mRNA production and the unfolded protein response. *J Immunol.* 2014;193:4663-74. (ELISA Standard - Serum)
41. Xu Y, Zeumer L, Reeves WH, Morel L. Induced murine models of systemic lupus erythematosus. *Methods Mol Biol.* 2014;1134:103-30. (ELISA Standard - Serum)
42. Huang Q, Perlman H, Birkett R, Doyle R, Fang D, Haines GK, et al. CD11c-mediated deletion of Flip promotes autoreactivity and inflammatory arthritis. *Nat Commun.* 2015;6:7086. (ELISA Standard - Serum)
43. Ying Z, Mei M, Zhang P, Liu C, He H, Gao F, et al. Histone arginine methylation by PRMT7 controls germinal center formation via regulating Bcl6 transcription. *J Immunol.* 2015;195:1538-47. (ELISA Standard - Serum)
44. Yoachim SD, Nuxoll JS, Bynoté KK, Gould KA. Estrogen receptor alpha signaling promotes Sle1-induced loss of tolerance and immune cell activation and is responsible for sex bias in B6.Sle1 congenic mice. *Clin Immunol.* 2015;158:153-66. (ELISA Standard - Serum)

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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 • **Website:** www.southernbiotech.com