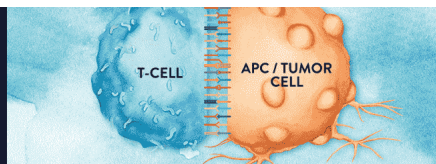


Ultra-pure antibodies for
in vivo research, targeting
immune checkpoints
and more.

EXPLORE

BioCell



 *The Journal of*
Immunology

154 (5)

J Immunol 1995; 154:2005-2522; ;
<http://www.jimmunol.org/content/154/5.citation>

This information is current as
of March 9, 2021.

Why *The JI*? [Submit online.](#)

- **Rapid Reviews!** 30 days* from submission to initial decision
- **No Triage!** Every submission reviewed by practicing scientists
- **Fast Publication!** 4 weeks from acceptance to publication

*average

- Subscription** Information about subscribing to *The Journal of Immunology* is online at:
<http://jimmunol.org/subscription>
- Permissions** Submit copyright permission requests at:
<http://www.aai.org/About/Publications/JI/copyright.html>
- Email Alerts** Receive free email-alerts when new articles cite this article. Sign up at:
<http://jimmunol.org/alerts>

The Journal of Immunology is published twice each month by
The American Association of Immunologists, Inc.,
1451 Rockville Pike, Suite 650, Rockville, MD 20852
All rights reserved.
Print ISSN: 0022-1767 Online ISSN: 1550-6606.



TABLE OF CONTENTS

CELLULAR IMMUNOLOGY AND IMMUNE REGULATION

- 2005 Engagement of the Vitronectin Receptor ($\alpha V\beta 3$) on Murine T Cells Stimulates Tyrosine Phosphorylation of a 115-kDa Protein
Clara Brando and Ethan M. Shevach
- 2012 AD2, A Human Molecule Involved in the Interaction of T Cells with Epidermal Keratinocytes and Thymic Epithelial Cells
Carol S. Bruggers, Dhavalkumar D. Patel, Richard M. Scearce, Leona P. Whichard, Barton F. Haynes, and Kay H. Singer
- 2023 *Bcl-2* Blocks Degranulation but not *fas*-based Cell-Mediated Cytotoxicity
Vi K. Chiu, Craig M. Walsh, Chau-Ching Liu, John C. Reed, and William R. Clark
- 2033 Ligand Binding by the IL-2 Receptor Is Modulated by Intracellular Determinants of the IL-2 Receptor β -Chain
Mark A. Goldsmith, M. Catherine Amaral, and Warner C. Greene
- 2041 Mitogen Activation of a Nuclear Alkaline Phosphatase in Normal Activated Lymphocytes
Amy L. Kenter and Leslie Morgan
- 2051 Early Appearance of "Natural" Mucosal IgA Responses and Germinal Centers in Suckling Mice Developing in the Absence of Maternal Antibodies
David R. Kramer and John J. Cebra
- 2063 Decreased CD4⁻CD8⁻ TCR- $\alpha\beta$ ⁺ Cells in *lpr/lpr* Mice Lacking β_2 -Microglobulin
Philip F. Mixer, Jennifer Q. Russell, Fiona H. Durie, and Ralph C. Budd
- 2075 T Cell Receptor α -Chain Defines the Antigen Specificity of Antigen-Specific Suppressor Factor but Does Not Impart Genetic Restriction
Richard M. O'Hara, Jr., Michael C. Byrne, Vijay K. Kuchroo, AnnMarie Nagelin, Matthew J. Whitters, Sundararajan Jayaraman, Sheryl L. Henderson, Martin E. Dorf, and Mary Collins

- 2082 Perturbation of B Cell Genesis in the Bone Marrow of Pristane-Treated Mice: Implications for Plasmacytoma Induction
Sergio A. Rico-Vargas, Michael Potter, and Dennis G. Osmond
- 2092 B Cell Superstimulatory Influenza Virus (H2-Subtype) Induces B Cell Proliferation by a PKC-Activating, Ca²⁺-Independent Mechanism
Ortwin Rott, Jeannine Charreire, Monique Semichon, Georges Bismuth, and Evelyne Cash
- 2104 Antigen-Independent, Integrin-Mediated T Cell Activation
Knut Sturmhöfel, Clara Brando, Frédéric Martinon, Ethan M. Shevach, and John E. Coligan
- 2112 Regulation of Lymphocyte Pseudopodia Formation by Triggering the Integrin α_4/β_1
Margit C. Szabo, T. Kent Teague, and Bradley W. McIntyre
- 2125 Expression of a Novel Integrin β_1 Chain Epitope and Anti- β_1 Antibody-Mediated Enhancement of Fibronectin Binding Are Dependent on the Stage of T Cell Differentiation
Scott A. Wadsworth, Andrew C. Chang, Myung-Joo P. Hong, Mark J. Halvorson, Stephanie Otto, and John E. Coligan
- 2134 Murine Minor Histocompatibility Antigens Detected by Helper T Cells: Recognition of an Endogenous Peptide
Peter J. Wettstein
- 2144 Restoring the Apoptosis Suppression Response to IL-5 Confers on Erythroleukemic Cells a Phenotype of IL-5-Dependent Growth
Jeffrey J.-Y. Yen, Yueh-Chun Hsieh, Chi-Liang Yen, Chia-Che Chang, Shirley Lin, and Hsin-Fang Yang-Yen

MOLECULAR AND STRUCTURAL IMMUNOLOGY

- 2153 Transgenic Control of Perforin Gene Expression: Functional Evidence for Two Separate Control Regions
Mathias G. Lichtenheld, Eckhard R. Podack, and Robert B. Levy
- 2164 Isolation, Primary Structure, and Evolution of the Third Component of Chicken Complement and Evidence for a New Member of the α_2 -Macroglobulin Family
Manolis Mavroidis, J. Oriol Sunyer, and John D. Lambris
- 2175 Recombination Potential of the Human DIR Elements
Bethany B. Moore and Katheryn Meek
- 2188 Sequence Constraints and Recognition by CTL of an HLA-B27-Restricted HIV-1 *gag* Epitope
Wilfried Nietfeld, Monika Bauer, Michele Fevrier, Reinhard Maier, Birgit Holzwarth, Ronald Frank, Bernhard Maier, Yves Riviere, and Andreas Meyerhans

- 2198 Domain Interactions and Antigen Binding of Recombinant Anti-Z-DNA Antibody Variable Domains: The Role of Heavy and Light Chains Measured by Surface Plasmon Resonance
Michael Polymenis and B. David Stollar
- 2209 Binding Analysis of Antibodies Produced by Precursor and Branchpoint Intermediates of an Anti-Influenza Hemagglutinin B Cell Clone: Parallel Replacement Mutations Do Not Confer Increased Avidity for Hemagglutinin
Robert C. Rickert, Mary Kopke Wloch, Robyn L. Hahn, and Stephen H. Clarke
- 2217 Regulatory Regions 3' of the Immunoglobulin Heavy Chain Intronic Enhancer Differentially Affect Expression of a Heavy Chain Transgene in Resting and Activated B Cells
Dagmar Sigurdardottir, Jeongwon Sohn, Jamie Kass, and Erik Selsing
- 2226 Addition of a μ -Tailpiece to IgG Results in Polymeric Antibodies with Enhanced Effector Functions Including Complement-Mediated Cytolysis by IgG4
Richard I. F. Smith, M. Josefina Coloma, and Sherie L. Morrison
- 2237 Secondary Deletional Recombination of Rearranged Switch Region in Ig Isotype-Switched B Cells: A Mechanism for Isotype Stabilization
Ke Zhang, Hai-Kit Cheah, and Andrew Saxon

HOST DEFENSE

- 2248 Resistance of Melanoma Cell Lines to Interferons Correlates with Reduction of IFN-Induced Tyrosine Phosphorylation: Induction of the Anti-Viral State by IFN Is Prevented by Tyrosine Kinase Inhibitors
Stephen J. Ralph, Bruce D. Wines, Michael J. Payne, Darren Grubb, Irene Hatzinisiriou, Anthony W. Linnane, and Rodney J. Devenish
- 2257 Induction of Tumor-Reactive CTL from Peripheral Blood and Tumor-Infiltrating Lymphocytes of Melanoma Patients by In Vitro Stimulation with an Immunodominant Peptide of the Human Melanoma Antigen MART-1
Licia Rivoltini, Yutaka Kawakami, Kazuyasu Sakaguchi, Scott Southwood, Alessandro Sette, Paul F. Robbins, Francesco M. Marincola, Michael L. Salgaller, John R. Yannelli, Ettore Appella, and Steven A. Rosenberg
- 2266 Characterization of RFM Mouse T Lymphocyte Anti-Oncofetal Antigen Immunity in Apparent Tumor-Free, Long-Term Survivors of Sublethal X-Irradiation by Limiting Dilution T Lymphocyte Cloning
James W. Rohrer, Craig Culpepper, Adel L. Barsoum, and Joseph H. Coggin, Jr.
- 2281 Regulatory Mechanisms for Production of IFN- γ and TNF by Antitumor T Cells or Macrophages in the Tumor-Bearing State
Norihiko Yamamoto, Jian-Ping Zou, Xiao-Fei Li, Hiroshi Takenaka, Satoshi Noda, Tetsuya Fujii, Shiro Ono, Yoshiro Kobayashi, Naoshi Mukaida, Kouji Matsushima, Hiromi Fujiwara, and Toshiyuki Hamaoka

INFLAMMATION

- 2291 Activation of Human Neutrophils Through L-Selectin and Mac-1 Molecules
Elahe Crockett-Torabi, Brent Sulenbarger, C. Wayne Smith, and Joseph C. Fantone
- 2303 Mutation of Residues in the C3dg Region of Human Complement Component C3 Corresponding to a Proposed Binding Site for Complement Receptor Type 2 (CR2, CD21) Does Not Abolish Binding of iC3b or C3dg to CR2
Russell J. Diefenbach and David E. Isenman
- 2321 Human IL-1 β Processing and Secretion in Recombinant Baculovirus-Infected Sf9 Cells Is Blocked by the Cowpox Virus Serpin *crmA*
Andrew D. Howard, Oksana C. Palyha, Patrick R. Griffin, Erin P. Peterson, Albert B. Lenny, Gloria J.-F. Ding, David J. Pickup, Nancy A. Thornberry, John A. Schmidt, and Michael J. Tocci
- 2333 Pyrrolidine Dithiocarbamate Inhibits Intercellular Adhesion Molecule-1 Biosynthesis Induced by Cytokines In Human Fibroblasts
Masahiko Kawai, Ryuta Nishikomori, Eun-Young Jung, Guixiang Tai, Chutarō Yamanaka, Mitsufumi Mayumi, and Toshio Heike
- 2342 Macrophage Inflammatory Protein-1 α Enhances Growth Factor-Stimulated Phosphatidylcholine Metabolism and Increases cAMP Levels in the Human Growth Factor-Dependent Cell Line M07e, Events Associated with Growth Suppression
Charlie Mantel, Susan Aronica, Zaiming Luo, Mark S. Marshall, Young June Kim, Scott Cooper, Nancy Hague, and Hal E. Broxmeyer
- 2351 Substrate Specificities of the Protease of Mouse Serum Ra-Reactive Factor
Ronald T. Ogata, Pamela J. Low, and Masaya Kawakami
- 2358 Activation of cAMP-Dependent Pathways in Human Airway Smooth Muscle Cells Inhibits TNF- α -Induced ICAM-1 and VCAM-1 Expression and T Lymphocyte Adhesion
Reynold A. Panettieri, Jr., Aili L. Lazaar, Ellen Puré, and Steven M. Albelda
- 2366 Proinflammatory Cytokines Potentiate Thrombospondin-Mediated Phagocytosis of Neutrophils Undergoing Apoptosis
Yi Ren and John Savill
- 2375 IL-8 Specifically Binds to Endothelial but Not to Smooth Muscle Cells
Uwe Schönbeck, Ernst Brandt, Frank Petersen, Hans-Dieter Flad, and Harald Loppnow
- 2384 Isolation of Nine Gene Sequences Induced by Silica in Murine Macrophages
Fernando Segade, Estefanía Claudio, Kazimierz Wrobel, Sofía Ramos, and Pedro S. Lazo

- 2393 Bone Marrow-Derived Murine Mast Cells Migrate, but Do Not Degranulate, in Response to Chemokines
Dennis Taub, Jaroslaw Dastyg, Noriaki Inamura, James Upton, David Kelvin, Dean Metcalfe, and Joost Oppenheim
- 2403 In Vivo Regulation of Rat Neutrophil Apoptosis Occuring Spontaneously or Induced with TNF- α or Cycloheximide
Hideya Tsuchida, Yuji Takeda, Hiroshi Takei, Haruhide Shinzawa, Tsuneo Takahashi, and Fujiro Sendo
- 2413 Investigation of Neutrophil Signal Transduction Using a Specific Inhibitor of Phosphatidylinositol 3-Kinase
Chris J. Vlahos, William F. Matter, Raymond F. Brown, Alexis E. Traynor-Kaplan, Paul G. Heyworth, Eric R. Prossnitz, Richard D. Ye, Philip Marder, Judi A. Schelm, Kimberly J. Rothfuss, Bruce S. Serlin, and Paul J. Simpson

CLINICAL IMMUNOLOGY

- 2424 Glomerular Binding Activity in MRL *lpr* Serum Consists of Antibodies That Bind to a DNA/Histone/Type IV Collagen Complex
Keith A. Bernstein, Richard Di Valerio, and James B. Lefkowitz
- 2434 Mucosal Imbalance of IL-1 and IL-1 Receptor Antagonist in Inflammatory Bowel Disease: A Novel Mechanism of Chronic Intestinal Inflammation
Vincenzo Casini-Raggi, Lori Kam, Yoo Jin T. Chong, Claudio Fiocchi, Theresa T. Pizarro, and Fabio Cominelli
- 2441 Analysis of the New Zealand Black Contribution to Lupus-Like Renal Disease: Multiple Genes That Operate in a Threshold Manner
Charles G. Drake, Stephen J. Rozzo, Hayden F. Hirschfeld, N. Pamela Smarnworawong, Ed Palmer, and Brian L. Kotzin
- 2448 HIV Replication in IL-2-Stimulated Peripheral Blood Mononuclear Cells Is Driven in an Autocrine/Paracrine Manner by Endogenous Cytokines
Audrey L. Kinter, Guido Poli, Lawrence Fox, Elena Hardy, and Anthony S. Fauci
- 2460 A Monoclonal Autoantibody That Promotes Central Nervous System Remyelination in a Model of Multiple Sclerosis Is a Natural Autoantibody Encoded by Germline Immunoglobulin Genes
David J. Miller and Moses Rodriguez
- 2470 Intragraft Expression of Cytokine Transcripts During Pig Proislet Xenograft Rejection and Tolerance in Mice
Carolyn F. Morris, Charmaine J. Simeonovic, Ming-Chiu Fung, J. Dennis Wilson, and Andrew J. Hapel
- 2483 IgG but Not Other Classes of Anti-[(H2A-H2B)-DNA] Is an Early Sign of Procainamide-Induced Lupus
Robert L. Rubin, Rufus W. Burlingame, Janice E. Arnott, Mark C. Totoritis, Edward M. McNally, and Allen D. Johnson

- 2494 **Beta-Cell-Cytotoxic CD8⁺ T Cells from Nonobese Diabetic Mice Use Highly Homologous T Cell Receptor α -Chain CDR3 Sequences**
Pere Santamaria, Toshihiro Utsugi, Byung-Ju Park, Nuzhat Averill, Shoji Kawazu, and Ji-Won Yoon
- 2504 **Breaking Tolerance Leads to Autoantibody Production but Not Autoimmune Liver Disease in Hepatitis B Virus Envelope Transgenic Mice**
Susanne Wirth, Luca G. Guidotti, Kazuki Ando, Hans-Jürgen Schlicht, and Francis V. Chisari
- 2516 **A MHC Class I B Locus Allele-Restricted Simian Immunodeficiency Virus Envelope CTL Epitope in Rhesus Monkeys**
Yasuhiro Yasutomi, Stephen N. McAdam, Jonathan E. Boyson, Marian S. Piekarczyk, David I. Watkins, and Norman L. Letvin
- 2523 **Author Index**
- 2525 **Information for Authors**
- 2527 **Submission Form**
- 2528 **Membership Application**