



Target human
immune checkpoints for
immuno-oncology studies



Validated
mouse models



121 (2)

J Immunol 1978; 121:401-790; ;
<http://www.jimmunol.org/content/121/2.citation>

This information is current as
of January 19, 2022.

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>



Contents

CELLULAR IMMUNOLOGY

- | | | |
|---|-----|---|
| B. Leshem and D. Naor | 401 | Studies on the Immune Response to Fixed Antigens. III. Induction of Helper Function for Antibody-Dependent Cellular Cytotoxicity Responses |
| L. Räsänen, E. Karhumäki, and H. Arvilommi | 418 | Bacteria Induce Lymphokine Synthesis Polyclonally in Human B Lymphocytes |
| J. London, S. Berrih, and J.-F. Bach | 438 | Peanut Agglutinin. I. A New Tool for Studying T Lymphocyte Subpopulations |
| P. A. Cazenave, D. Juy, and C. Bona | 444 | Ontogeny of Lymphocyte Functions during Embryonic Life of the Rabbit |
| R. Fritsche and H. L. Spiegelberg | 471 | Fc Receptors for IgE on Normal Rat Lymphocytes |
| V. J. Merluzzi, E. M. Levy, V. Kumar, M. Bennett, and S. R. Cooperband | 505 | <i>In Vitro</i> Activation of Suppressor Cells from Spleens of Mice Treated with Radioactive Strontium |
| R. L. Whisler and J. D. Stobo | 539 | Suppression of Humoral and Delayed Hypersensitivity Responses by Distinct T Cell Subpopulations |
| M. K. Hoffmann | 619 | Serum from LPS Non-responder C3H/HeJ Mice Does Not Support the Formation of Functional EAC Reagents |
| W. T. Weber and J. E. Alexander | 653 | The Potential of Bursa-Immigrated Hematopoietic Precursor Cells to Differentiate to Functional B and T Cells |
| D. A. Horwitz, P. Niaudet, M. F. Greaves, J. Dorling, and P. De-teix | 678 | Surface Markers and Electron Microscopy of Human Blood L Cells: A Comparison with T and B Lymphocytes |
| D. L. Rosenstreich, S. N. Vogel, A. Jacques, L. M. Wahl, I. Scher and S. E. Mergenhagen | 685 | Differential Endotoxin Sensitivity of Lymphocytes and Macrophages from Mice with an X-linked Defect in B Cell Maturation |
| G. R. Klimpel and C. S. Henney | 749 | A Comparison of the Effects of T and Macrophage-Like Suppressor Cells on Memory Cell Differentiation <i>in Vitro</i> |
| L. Polak and C. Rinck | 762 | Persistent Activity of Suppressor Cells in T Cell-Mediated Immune Response |
| M. C. Mingari, L. Moretta, A. Moretta, M. Ferrarini, and J. L. Preud'homme | 767 | Fc-Receptors for IgG and IgM Immunoglobulins on Human T Lymphocytes: Mode of Re-expression after Proteolysis or Interaction with Immune Complexes |

CLINICAL IMMUNOLOGY

- | | | |
|---|-----|---|
| K. Hammerton, D. A. Cooper, M. Duckett, and R. Penny | 409 | Biosynthesis of Immunoglobulin in Human Immunoproliferative Diseases. I. Kinetics of Synthesis and Secretion of Immunoglobulin and Protein by Bone Marrow Cells in Myeloma |
| B. F. Haynes and A. S. Fauci | 559 | Activation of Human B Lymphocytes. X. Heterogeneity of Concanavalin A-Generated Suppressor Cells of the Pokeweed Mitogen-Induced Plaque-Forming Cell Response of Human Peripheral Blood Lymphocytes |
| R. J. Marder, F. X. Burch, F. R. Schmid, C. R. Zeiss, and H. Gewurz | 613 | Low Molecular Weight C1q-Precipitins in Hypocomplementemic Vasculitis-Urticaria Syndrome: Partial Purification and Characterization as Immunoglobulin |
| J. B. Smith, R. P. Knowlton, and S. S. Agarwal | 691 | Human Lymphocyte Responses are Enhanced by Culture at 40°C |
| D. M. Callewaert, D. F. Johnson, and J. Kearney | 710 | Spontaneous Cytotoxicity of Cultured Human Cell Lines Mediated by Normal Peripheral Blood Lymphocytes. III. Kinetic Parameters |
| W. H. Grover, H. H. Winkler, and D. E. Normansell | 718 | Phagocytic Properties of Isolated Human Eosinophils |
| C. Fournier and J. Charreire | 771 | Activation of a Human T Cell Subpopulation Bearing Receptors for Autologous Erythrocytes by Concanavalin A |

IMMUNOCHEMISTRY

- | | | |
|--|-----|---|
| M. Schwartz, R. Lifshitz, D. Givol, E. Mozes, and J. Haimovich | 421 | Cross-Reactive Idiotypic Determinants on Murine Anti-(T,G)-A—L Antibodies |
|--|-----|---|

| | | |
|---|-----|---|
| E. R. Podack, G. Biesecker, W. P. Kolb, and H. J. Müller-Eberhard | 484 | The C5b-6 Complex: Reaction with C7, C8, C9 |
| E. W. Ades, A. Bukacek, R. K. Zwerner, P. A. Dougherty, and C. M. Balch | 513 | Expression of Two Differentiation Antigens on Normal and Cultured Human T Cells |
| D. D. Tsay and M. Schlamowitz | 520 | Binding of IgG and Papain-Derived Fragments to Fc Receptors of the Fetal Rabbit Yolk Sac Membrane |
| C. Isersky, J. D. Taurog, G. Poy, and H. Metzger | 549 | Triggering of Cultured Neoplastic Mast Cells by Antibodies to the Receptors for IgE |
| R. M. Perlmutter, D. Hansberg, D. E. Briles, R. A. Nicolotti, and J. M. Davie | 566 | Subclass Restriction of Murine Anti-carbohydrate Antibodies |
| C. Wofsy, B. Goldstein, and M. Dembo | 593 | Theory of Equilibrium Binding of Asymmetric Bivalent Haptens to Cell Surface Antibody: Application to Histamine Release from Basophils |
| C. L. Anderson and H. M. Grey | 648 | Physicochemical Separation of Two Distinct Fc Receptors on Murine Macrophage-Like Cell Lines |
| W. D. Linscott, R. Ranken, and R. P. Triglia | 658 | Evidence That Bovine Conglutinin Reacts with an Early Product of C3b Degradation, and an Improved Conglutination Assay |
| M. Joskowicz, C. Rabourdin-Combe, C. Neauport-Sautes, and W. H. Fridman | 777 | Characterization of Suppressive Immunoglobulin-Binding Factor (IBF). III. Biochemical and Immunochemical Characteristics of IBF Produced by Activated T Cells |

IMMUNOGENETICS AND TRANSPLANTATION

| | | |
|---|-----|--|
| Y. Kaneko, S. Natsumme-Sakai, and S. Migita | 427 | Cytotoxic T Lymphocytes to Murine Plasmacytoma Cells in Allogeneic and Syngeneic Mice: H-2 Antigens Are Essential in the Induction and Effector Stages of CTL |
| T. W. Jungi and D. D. McGregor | 449 | Allogeneic Restriction of Acquired Antimicrobial Resistance in the Rat |
| T. W. Jungi and D. D. McGregor | 456 | Allogeneic Restriction of the Delayed Inflammatory Reaction in the Rat |
| S. Natsumme-Sakai, J.-I. Hayakawa, and M. Takahashi | 491 | Genetic Polymorphism of Murine C3 Controlled by a Single Co-dominant Locus on Chromosome 17 |
| J. P. Allison, M. Belvedere, R. A. Reisfeld, M. A. Pellegrino, and S. Ferrone | 579 | Serologic and Immunochemical Characterization of HLA-A9 Xenoantisera |
| R. N. Germain, J. Theze, C. Waltenbaugh, M. E. Dorf, and B. Benacerraf | 602 | Antigen-Specific T Cell-Mediated Suppression. II. <i>In Vitro</i> Induction by I-J Coded L-Glutamic Acid ⁵⁰ -L-Tyrosine ⁵⁰ (GT)-Specific T Cell Suppressor Factor (GT-T _S F) of Suppressor T Cells (T _{S2}) Bearing Distinct I-J Determinants |
| R. N. Germain and B. Benacerraf | 608 | Antigen-Specific T Cell-Mediated Suppression. III. Induction of Antigen-Specific Suppressor T Cells (T _{S2}) in L-Glutamic Acid ⁶⁰ -L-Alanine ³⁰ -L-Tyrosine ¹⁰ (GAT) Responder Mice by Nonresponder-Derived GAT-Suppressor Factor (GAT-T _S F) |
| N. Shinohara, J. K. Lunney, and D. H. Sachs | 637 | Sharing of Ia Antigens between Species. II. Molecular Localization of Shared Ia Determinants Implies the Existence of More Than One / Sublocus of the Rat MHC |
| S. L. Swain | 671 | Mechanism of Allosuppression: Evidence for Direct Suppression of Responding B Cells |
| G. Ferrara, R. Tosi, A. Longo, A. Castellani, C. Viviani, and G. Carminati | 731 | "Silent" Alleles at the HLA-C Locus |
| B. Singh, E. Fraga, and M. Barton | 784 | Characterization and Genetic Control of the Immune Response to Synthetic Polypeptide Antigens of Defined Geometry |

IMMUNOPATHOLOGY

| | | |
|---|-----|---|
| N. S. Orenstein, S. J. Galli, A. M. Dvorak, J. E. Silbert, and H. F. Dvorak | 586 | Sulfated Glycosaminoglycans of Guinea Pig Basophilic Leukocytes |
| G. A. Hashim, E. F. Carvalho, and R. D. Sharpe | 665 | Definition and Synthesis of the Essential Amino Acid Sequence for Experimental Allergic Encephalomyelitis in Lewis Rats |
| K. Nakamura, Y. Nakamura, and M. Kawahara | 702 | A model for the Autosensitization Autoantibody Production Associated with Xeno-genetic Thymic RNA |

TUMOR IMMUNOLOGY

| | | |
|---------------|-----|---|
| S. H. Bridges | 479 | Participation of the Humoral Immune System in the Myeloma-Specific Transplantation Resistance |
|---------------|-----|---|

Continued on page 4

Continued from page 3

| | | |
|---|-----|---|
| M. H. J. van Oers, R. E. Y. de Goede, and W. P. Zeijlemaker | 499 | Antibody-Dependent Lymphocytotoxicity: An Analysis of Effector Cell-Target Cell Interactions |
| L. P. Ruco, M. S. Meltzer, and D. L. Rosenstreich | 543 | Macrophage Activation for Tumor Cytotoxicity: Control of Macrophage Tumoricidal Capacity by the LPS Gene |
| G. M. Shaw, P. C. Levy, and A. F. LoBuglio | 573 | Human Monocyte Cytotoxicity to Tumor Cells. I. Antibody-Dependent Cytotoxicity |
| C. J. Paige, P. W. Kincade, and P. Ralph | 641 | Murine B Cell Leukemia Line with Inducible Surface Immunoglobulin Expression |
| S. Landolfo, R. B. Herberman, and H. T. Holden | 695 | Macrophage-Lymphocyte Interaction in Migration Inhibition Factor (MIF) Production against Soluble or Cellular Tumor-Associated Antigens. I. Characteristics and Genetic Control of Two-Different Mechanisms of Stimulating MIF Production |

VIRAL AND MICROBIAL IMMUNOLOGY

| | | |
|--|-----|--|
| D. K. Kelsey, J. C. Overall, Jr., and L. A. Glasgow | 464 | Correlation of the Suppression of Mitogen Responsiveness and the Mixed Lymphocyte Reaction with the Proliferative Response to Viral Antigen of Splenic Lymphocytes from Cytomegalovirus-Infected Mice |
| D. Santoli, G. Trinchieri, and F. S. Lief | 526 | Cell-Mediated Cytotoxicity against Virus-Infected Target Cells in Humans. I. Characterization of the Effector Lymphocyte |
| D. Santoli, G. Trinchieri, and H. Koprowski | 532 | Cell-Mediated Cytotoxicity against Virus-Infected Target Cells in Humans. II. Interferon Induction and Activation of Natural Killer Cells |
| A. N. Jayawardena, B. H. Waksman, and D. D. Eardley | 622 | Activation of Distinct Helper and Suppressor T Cells in Experimental Trypanosomiasis |
| F. I. Weinbaum, J. Weintraub, F. K. Nkrumah, C. B. Evans, R. E. Tigerlaar, and Y. J. Rosenberg | 629 | Immunity of <i>Plasmodium berghei yoelii</i> in Mice. II. Specific and Nonspecific Cellular and Humoral Responses during the Course of Infection |
| S. P. McTaggart, W. H. Burns, D. O. White, and D. C. Jackson | 726 | Fc Receptors Induced by Herpes Simplex Virus. I. Biologic and Biochemical Properties |
| A. J. Hapel, R. Bablanian, and G. A. Cole | 736 | Inductive Requirements for the Generation of Virus-Specific T Lymphocytes. I. The Nature of the Host Cell-Virus Interaction That Triggers Secondary Poxvirus-Specific Cytotoxic T Lymphocyte Induction |
| R. M. Zinkernagel, A. Althage, and J. Holland | 744 | Target Antigens for <i>H-2</i> Restricted Vesicular Stomatitis Virus-Specific Cytotoxic T Cells |
| B. Harfast, T. Andersson, and P. Perlman | 755 | Immunoglobulin-Independent Natural Cytotoxicity of Fc-Receptor-Bearing Human Blood Lymphocytes to Mumps Virus-Infected Target Cells |
| Erratum | 790 | |
| Author Index | 791 | |