

Luminex
complexity simplified.



Flow Cytometry with Vision.

Amnis[®] ImageStream[™] Mk II and
FlowSight[™] Imaging Flow Cytometers

LEARN MORE >



129 (2)

J Immunol 1982; 129:445-910; ;
<http://www.jimmunol.org/content/129/2.citation>

This information is current as
of November 24, 2020.

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.



Contents

COMMUNICATIONS

- | | | |
|---|-----|--|
| M. D. Golan, R. Burger, and M. Loos | 445 | Conformational Changes in C1q after Binding to Immune Complexes: Detection of Neoantigens with Monoclonal Antibodies |
| A. S. Daar, S. V. Fuggle, A. Ting, and J. W. Fabre | 447 | Anomalous Expression of HLA-DR Antigens on Human Colorectal Cancer Cells |
| M. Matsuyama, K. Sugamura, Y. Kawade, and Y. Hinuma | 450 | Production of Immune Interferon by Human Cytotoxic T Cell Clones |
| D. J. Anderson, D. L. Bach, E. J. Yunis, and W. C. DeWolf | 452 | Major Histocompatibility Antigens Are Not Expressed on Human Epididymal Sperm |

CELLULAR IMMUNOLOGY

- | | | |
|--|-----|---|
| R. L. Whisler, Y. G. Newhouse, and L. B. Lachman | 455 | Heterogeneity of Human Monocyte Subsets in the Promotion of B Cell Colonies and the Role of Interleukin 1 |
| S. D. Miller, L. D. Butler, and H. N. Claman | 461 | Suppressor T Cell Circuits in Contact Sensitivity. I. Two Mechanistically Distinct Waves of Suppressor T Cells Occur in Mice Tolerized with Syngeneic DNP-Modified Lymphoid Cells |
| D. C. Parker | 469 | Separable Helper Factors Support B Cell Proliferation and Maturation to Ig Secretion |
| H. Kawanishi, L. E. Saltzman, and W. Strober | 475 | Characteristics and Regulatory Function of Murine Con A-Induced, Cloned T Cells Obtained from Peyer's Patches and Spleen: Mechanisms Regulating Isotype-Specific Immunoglobulin Production by Peyer's Patch B Cells |
| H. Braley-Mullen | 484 | Differential Effect of Activated T Amplifier Cells on B Cells Responding to Thymus-Independent Type 1 and Type 2 Antigens |
| T. Leanderson, V. Hillörn, D. Holmberg, E.-L. Larsson, and E. Lundgren | 490 | Selective Effects of Interferon on Distinct Sites of the T Lymphocyte Triggering Process |
| S. A. Cohen, D. Salazar, and J. P. Nolan | 495 | Natural Cytotoxicity of Isolated Rat Liver Cells |
| G. Chaouat, B. J. Mathieson, and R. Asofsky | 502 | Regulatory Mechanisms in the Mixed Lymphocyte Reaction: Evidence for the Requirement of Two T Cells to Interact in the Generation of Effective Suppression |
| T. F. Huff, T. Uede, and K. Ishizaka | 509 | Formation of Rat IgE-Binding Factors by Rat-Mouse T Cell Hybridomas |
| B. Zimmerman, S. L. Swain, and R. W. Dutton | 515 | Immunosuppressive ATS. V. Analysis of the Effect of Anti-thymocyte Serum on T Lymphocyte Subsets |
| H. R. MacDonald, R. K. Lees, A. L. Glasebrook, and B. Sordat | 521 | Interleukin 2 Production by Lymphoid Cells from Congenitally Athymic (nu/nu) Mice |
| W. A. Kamps and M. D. Cooper | 526 | Microenvironmental Studies of Pre-B and B Cell Development in Human and Mouse Fetuses |
| V. Manohar, E. Brown, W. M. Leiserson, and T. M. Chused | 532 | Expression of Lyt-1 by a Subset of B Lymphocytes |
| P. Roth, J. P. Halper, I. B. Weinstein, and B. Pernis | 539 | A Phorbol Ester Tumor Promoter Induces Changes in the Expression of Immunoglobulins and DR Antigens in Human Lymphoblastoid Cells |
| J. W. Schrader, W.-F. Chen, and R. Scollay | 545 | The Acquisition of Receptors for Peanut Agglutinin by Peanut Agglutinin-Negative Thymocytes and Peripheral T Cells |
| A. Kelso, A. L. Glasebrook, O. Kanagawa, and K. T. Brunner | 550 | Production of Macrophage-Activating Factor by T Lymphocyte Clones and Correlation with Other Lymphokine Activities |
| A. A. Nordin and M. H. Schreier | 557 | T Cell Control of the Antibody Response to the T-Independent Antigen, DAGG-Ficoll |

Continued on page 4

CLINICAL IMMUNOLOGY

- | | | |
|--|-----|--|
| F. M. Melewicz, J. M. Plummer, and H. L. Spiegelberg | 563 | Comparison of the Fc Receptors for IgE on Human Lymphocytes and Monocytes |
| G. F. Pierce and S. H. Polmar | 570 | Lymphocyte Dysfunction in Cartilage-Hair Hypoplasia: Evidence for an Intrinsic Defect in Cellular Proliferation |
| K. B. Elkon, D. L. Delacroix, A. E. Gharavi, J. P. Vaerman, and G. R. V. Hughes | 576 | Immunoglobulin A and Polymeric IgA Rheumatoid Factors in Systemic Sicca Syndrome: Partial Characterization |
| K. Okudaira, R. P. Searles, J. S. Goodwin, and R. C. Williams, Jr. | 582 | Antibodies in the Sera of Patients with Systemic Lupus Erythematosus That Block the Binding of Monoclonal Anti-Ia to Ia-Positive Targets Also Inhibit the Autologous Mixed Lymphocyte Response |
| C. Bordignon, F. Villa, P. Allavena, M. Introna, A. Biondi, R. Avalone, and A. Mantovani | 587 | Inhibition of Natural Killer Activity by Human Bronchoalveolar Macrophages |
| M. Tsudo, T. Uchiyama, K. Takatsuki, H. Uchino, and J. Yodoi | 592 | Modulation of Tac Antigen on Activated Human T Cells by Anti-Tac Monoclonal Antibody |

IMMUNOCHEMISTRY

- | | | |
|---|-----|---|
| S. Romagnani, M. G. Giudizi, G. del Prete, E. Maggi, R. Biagiotti, F. Almerigogna, and M. Ricci | 596 | Demonstration on Protein A of Two Distinct Immunoglobulin-Binding Sites and Their Role in the Mitogenic Activity of <i>Staphylococcus aureus</i> Cowan I on Human B Cells |
| K. R. Willison, R. A. Karol, A. Suzuki, S. K. Kundu, and D. M. Marcus | 603 | Neutral Glycolipid Antigens as Developmental Markers of Mouse Teratocarcinoma and Early Embryos: An Immunologic and Chemical Analysis |
| B. K. Birshtein, R. Campbell, and B. Diamond | 610 | Effects of Immunoglobulin Structure on Fc Receptor Binding: A Mouse Myeloma Variant Immunoglobulin with a $\gamma 2b$ - $\gamma 2a$ Hybrid Heavy Chain Having a Complete $\gamma 2a$ Fc Region Fails to Bind to $\gamma 2a$ Fc Receptors on Mouse Macrophages |
| M. Pawlita, M. Potter, and S. Rudikoff | 615 | κ -Chain Restriction in Anti-Galactan Antibodies |
| Y.-W. Kim and J. F. Halsey | 619 | Metabolism and Clearance of Antibody-Excess Immune Complexes in Lactating Mice |
| M. E. Hemler and J. L. Strominger | 623 | Characterization of the Antigen Recognized by the Monoclonal Antibody (4F2): Different Molecular Forms on Human T and B Lymphoblastoid Cell Lines |
| F. D. Finkelman, I. Scher, J. J. Mond, S. Kessler, J. T. Kung, and E. S. Metcalf | 629 | Polyclonal Activation of the Murine Immune System by an Antibody to IgD. II. Generation of Polyclonal Antibody Production and Cells with Surface IgG |
| F. D. Finkelman, I. Scher, J. J. Mond, J. T. Kung, and E. S. Metcalf | 638 | Polyclonal Activation of the Murine Immune System by an Antibody to IgD. I. Increase in Cell Size and DNA Synthesis |
| K. Hong, T. Kinoshita, Y. Dohi, and K. Inoue | 647 | Effect of Trypsinization on the Activity of Human Factor H |
| S. L. Newell, D. C. Shreffler, and J. P. Atkinson | 653 | Biosynthesis of C4 by Mouse Peritoneal Macrophages. I. Characterization of an <i>in Vitro</i> Culture System and Comparison of C4 Synthesis by "Low" vs "High" C4 Strains |
| C. Horne, M. Klein, I. Polidoulis, and K. J. Dorrington | 660 | Noncovalent Association of Heavy and Light Chains of Human Immunoglobulins. III. Specific Interactions Between V_H and V_L |
| P. T. Le, M. T. Muller, and R. F. Mortensen | 665 | Acute Phase Reactants of Mice. I. Isolation of Serum Amyloid P-Component (SAP) and Its Induction by a Monokine |
| J. M. LeJeune, D. E. Briles, A. R. Lawton, and J. F. Kearney | 673 | Estimate of the Light Chain Repertoire Size of Fetal and Adult BALB/cJ and CBA/J Mice |
| D. R. Bundle, M. A. J. Gidney, N. Kassam, and A. F. R. Rahman | 678 | Hybridomas Specific for Carbohydrates: Synthetic Human Blood Group Antigens for the Production, Selection, and Characterization of Monoclonal Typing Reagents |

IMMUNOGENETICS AND TRANSPLANTATION

- | | | |
|---|-----|---|
| J. S. Bromberg, P. Lake, and M. Brunswick | 683 | Viral Antigens Act as Helper Determinants for Antibody Responses to Cell Surface Antigens |
| M. Allouche, J. A. Owen, and P. C. Doherty | 689 | Limit-Dilution Analysis of Weak Influenza-Immune T Cell Responses Associated with H-2K ^b and H-2D ^b |
| O. Weinberger, R. N. Germain, T. Springer, and S. J. Burakoff | 694 | Role of Syngeneic Ia ⁺ Accessory Cells in the Generation of Allospecific CTL Responses |

Continued on page 5

Continued from page 4

M. Brunswick, K. B. Sainis, J. S. Bromberg, and P. Lake	698	I-J Restriction of T Cells That Suppress <i>in Vivo</i> Antibody Responses to Thy-1
R. M. Gorczynski, S. MacRae, and M. Kennedy	704	Conditioned Immune Response Associated with Allogeneic Skin Grafts in Mice
E. M. Shevach, C. Chan, and H. Bitter-Suermann	710	Induction of Transplantation Tolerance in Guinea Pigs by Spleen Allografts. II. Responses in the Mixed Leukocyte Reaction Correlate with the Tolerant State
J.-J. Metzger, J. K. Lunney, D. H. Sachs, and S. Rudikoff	716	Transplantation in Miniature Swine. XII. N-Terminal Sequences of Class I Histocompatibility Antigens (SLA) and β_2 -Microglobulin
B. Shain, C. A. Holt, and F. Lilly	722	Lack of Specificity for Viral and H-2 Antigens by Anomalous T Killer Cells Generated in Murine Leukocyte Cultures
W. E. Biddison, D. D. Kostyu, J. L. Strominger, and M. S. Krangel	730	Delineation of Immunologically and Biochemically Distinct HLA-A2 Antigens

IMMUNOPATHOLOGY

G. S. Retzinger, S. C. Meredith, R. L. Hunter, K. Takayama, and F. J. Kézdy	735	Identification of the Physiologically Active State of the Mycobacterial Glycolipid Trehalose 6,6'-Dimycolate and the Role of Fibrinogen in the Biologic Activities of Trehalose 6,6'-Dimycolate Monolayers
P. A. J. Henricks, M. E. van Erven van der Tol, and J. Verhoef	745	Partial Removal of Sialic Acid Enhances Phagocytosis and the Generation of Superoxide and Chemiluminescence by Polymorphonuclear Leukocytes
W. F. Davidson	751	Immunologic Abnormalities of the Autoimmune Mouse, Palmerston North
J. A. Killen and R. H. Swanborg	759	Autoimmune Effector Cells. III. Role of Adjuvant and Accessory Cells in the <i>in Vitro</i> Induction of Autoimmune Encephalomyelitis
T. G. Tachovsky, M. Sandberg-Wollheim, and L. G. Baird	764	Rabbit Anti-Human CSF IgG. I. Characterization of Anti-idiotypic Antibodies Produced against MS CSF and Detection of Cross-Reactive Idiotypes in Several MS CSF
R. N. Smith, M. Sternlicht, and G. W. Butcher	771	The Alloantibody Response in the Allogeneically Pregnant Rat. I. The Primary and Secondary Responses and Detection of <i>Ir</i> Gene Control
R. N. Smith, R. T. Margolies, and M. Sternlicht	777	The Alloantibody Response in the Allogeneically Pregnant Rat. II. Primary Pregnancy-Induced Anti-RT1A ^a Alloantibodies Are Not as Cross-Reactive as Secondary Pregnancy-Induced or Conventionally Raised Alloantibodies
R. N. Smith and M. Sternlicht	783	The Alloantibody Response in the Allogeneically Pregnant Rat. III. The Location of the Alloantibody-Forming Cells
L. Hang, S. Izui, J. H. Slack, and F. J. Dixon	787	The Cellular Basis for Resistance to Induction of Tolerance in BXSB SLE Male Mice
S. J. Brown, S. J. Galli, G. J. Gleich, and P. W. Askenase	790	Ablation of Immunity to <i>Amblyomma americanum</i> by Anti-basophil Serum: Cooperation between Basophils and Eosinophils in Expression of Immunity to Ectoparasites (Ticks) in Guinea Pigs
S. P. Peters, A. Kagey-Sobotka, D. W. MacGlashan, Jr., M. I. Siegel, and L. M. Lichtenstein	797	The Modulation of Human Basophil Histamine Release by Products of the 5-Lipoxygenase Pathway
J.-M. Mencia-Huerta, R. Roubin, J.-L. Morgat, and J. Benveniste	804	Biosynthesis of Platelet-Activating Factor (PAF-acether). III. Formation of PAF-Acether from Synthetic Substrates
R. Roubin, J.-M. Mencia-Huerta, A. Landes, and J. Benveniste	809	Biosynthesis of Platelet-Activating Factor (PAF-acether). IV. Impairment of Acetyl-Transferase Activity in Thioglycollate-Elicited Mouse Macrophages

MICROBIAL IMMUNOLOGY

L. F. Qualtiere, R. Chase, and G. R. Pearson	814	Purification and Biologic Characterization of a Major Epstein Barr Virus-Induced Membrane Glycoprotein
P. A. Fitzgerald, P. von Wussow, and C. Lopez	819	Role of Interferon in Natural Kill of HSV-1-Infected Fibroblasts
C. Lopez, D. Kirkpatrick, P. A. Fitzgerald, C. Y. Ching, R. N. Pahwa, R. A. Good, and E. M. Smithwick	824	Studies of the Cell Lineage of the Effector Cells That Spontaneously Lyse HSV-1-Infected Fibroblasts (NK(HSV-1))
E. B. Mackie, B. M. Longenecker, H. R. Rabin, V. L. DiNinno, and L. E. Bryan	829	Immune Response of the Mouse to Gram-Negative Bacterial Outer Membrane Extracts as Assessed with Monoclonal Antibodies
S. A. Lukehart, S. A. Baker-Zander, and E. R. Gubish, Jr.	833	Identification of <i>Treponema pallidum</i> Antigens: Comparison with a Nonpathogenic Treponeme
M. Jungery and B. M. Ogilvie	839	Antibody Response to Stage-Specific <i>Trichinella spiralis</i> Surface Antigens in Strong and Weak Responder Mouse Strains
H. G. Kress and H. W. Kreth	844	HLA Restriction of Secondary Mumps-Specific Cytotoxic T Lymphocytes
C. G. Haidaris and P. F. Bonventre	850	A Role for Oxygen-Dependent Mechanisms in Killing of <i>Leishmania donovani</i> Tissue Forms by Activated Macrophages

Continued on page 6

TUMOR IMMUNOLOGY

A. S. Yu and I. D. Bernstein	856	T Helper Cells in Immune Mice Amplify the Primary Anti-tumor Cytotoxic Response
M. Lepoivre, J.-P. Tenu, G. Le-maire, and J.-F. Petit	860	Antitumor Activity and Hydrogen Peroxide Release by Macrophages Elicited by Trehalose Diesters
G. C. Koo, J. R. Peppard, and A. Hatzfeld	867	Ontogeny of Nk-1 ⁺ Natural Killer Cells. I. Proportion of Nk-1 ⁺ Cells in Fetal, Baby, and Old Mice
Z.-W. Dong, S. S. Witkin, G. Fernandes, N. Sarkar, R. A. Good, and N. K. Day	872	Circulating Immune Complexes, Antigens, and Antibodies Related to the Murine Mammary Tumor Virus in C3H Mice
M. Imamura and W. J. Martin	877	Variation in Histocompatibility Antigen Expression on Murine Tumors: Differences in Expression and Immunogenicity of H-2K Region-Coded Unique Antigens
C. C. Zielinski, S. D. Waksal, and S. K. Datta	882	Thymic Epithelium is Programmed to Induce Preleukemic Changes in Retrovirus Expression and Thymocyte Differentiation in Leukemia Susceptible Mice: Studies on Bone Marrow and Thymic Chimeras
S. J. Galli, R. C. Bast, Jr., B. S. Bast, T. Isomura, B. Zbar, H. J. Rapp, and H. F. Dvorak	890	Bystander Suppression of Tumor Growth: Evidence That Specific Targets and Bystanders Are Damaged by Injury to a Common Microvasculature
R. B. Whitaker, R. S. Kauffman, M. Che, and R. Finberg	900	CT Hybridomas: Tumor Cells Capable of Lysing Virally Infected Target Cells
M. Mayumi, H. Kubagawa, G. A. Omura, W. E. Gathings, J. F. Kearney, and M. D. Cooper	904	Studies on the Clonal Origin of Human B Cell Leukemia Using Monoclonal Anti-idiotypic Antibodies
Announcements	911	
Author Index	913	