



## Vaccine Adjuvants

Take your vaccine to the next level

InVivoGen



145 (12)

*J Immunol* 1990; 145:3949-4379; ;  
<http://www.jimmunol.org/content/145/12.citation>

This information is current as  
of January 19, 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.



# Contents

## CELLULAR IMMUNOLOGY

- J. L. Ambrus, Jr., L. Chesky, D. Stephany, P. MacFarland, H. Mostowski, and A. S. Fauci 3949 Functional Studies Examining the Subpopulation of Human B Lymphocytes Responding to High Molecular Weight B Cell Growth Factor
- W. C. Bartlett, J. McCann, D. M. Shepherd, M. Roy, and R. J. Noelle 3956 Cognate Interactions Between Helper T Cells and B Cells. IV. Requirements for the Expression of Effector Phase Activity by Helper T Cells
- N. H. Dang, Y. Torimoto, K. Sugita, J. F. Daley, P. Schow, C. Prado, S. F. Schlossman, and C. Morimoto 3963 Cell Surface Modulation of CD26 by Anti-1F7 Monoclonal Antibody: Analysis of Surface Expression and Human T Cell Activation
- T. R. Esch and D. W. Thomas 3972 Ia-Independent Binding of Peptide Antigen to the T Cell Receptor
- T. R. Esch, D. J. McKean, and D. W. Thomas 3979 The Role of Ia in the Formation of a T Cell Antigen-Recognition Complex
- P. E. Jensen and A. O. Kraft 3985 T Cells from Nonresponder Mice: MHC Restricted and Unrestricted Recognition of Insulin
- G. LeClercq, M. De Smedt, B. Tison, and J. Plum 3992 Preferential Proliferation of T Cell Receptor V $\gamma$ 3-Positive Cells in IL-2-Stimulated Fetal Thymocytes
- R. B. Levy, M. Jones, and C. Cray 3998 Isolated Peripheral T Cells from GvHR Recipients Exhibit Defective IL-2R Expression, IL-2 Production, and Proliferation in Response to Activation Stimuli
- S. Muller, L. Adorini, A. Juretic, and Z. A. Nagy 4006 Selective in Vivo Inhibition of T Cell Activation by Class II MHC-Binding Peptides Administered in Soluble Form
- T. Nishimura, Y. Takeuchi, Y. Ichimura, X. Gao, A. Akatsuka, N. Tamaoki, H. Yagita, K. Okumura, and S. Habu 4012 Thymic Stromal Cell Clone with Nursing Activity Supports the Growth and Differentiation of Murine CD4<sup>+</sup>8<sup>+</sup> Thymocytes in Vitro
- S. Oshima and D. D. Eckels 4018 Selective Signal Transduction through the CD3 or CD2 Complex Is Required for Class II MHC Expression by Human T Cells
- Y. Tomita, Y. Nishimura, N. Harada, M. Eto, K. Ayukawa, Y. Yoshikai, and K. Nomoto 4026 Evidence for Involvement of Clonal Anergy in MHC Class I and Class II Disparate Skin Allograft Tolerance after the Termination of Intrathymic Clonal Deletion
- C. M. Zacharchuk, M. Mercep, P. K. Chakraborti, S. S. Simons, Jr., and J. D. Ashwell 4037 Programmed T Lymphocyte Death: Cell Activation- and Steroid-Induced Pathways Are Mutually Antagonistic

## CLINICAL IMMUNOLOGY • IMMUNOPATHOLOGY

- M. Bruley-Rosset, I. Miconnet, C. Canon, and O. Halle-Panenko 4046 Mls<sup>a</sup>-Generated Suppressor Cells. I. Suppression Is Mediated by Double-Negative (CD3<sup>+</sup>CD5<sup>+</sup>CD4<sup>-</sup>CD8<sup>-</sup>)  $\alpha/\beta$  T Cell Receptor-Bearing Cells
- C. Fargeas, C. Wu, H. Luo, M. Sarfati, G. Delespesse, and J. Wu 4053 1,25(OH)<sub>2</sub> Vitamin D<sub>3</sub> Inhibits the CD23 Gene Expression by Human Peripheral Blood Monocytes
- M. Honda, K. Kitamura, Y. Mizutani, M. Oishi, M. Arai, T. Okura, K. Igarahi, K. Yasukawa, T. Hirano, T. Kishimoto, R. Mitsuyasu, J. Chermann, and T. Tokunaga 4059 Quantitative Analysis of Serum IL-6 and Its Correlation with Increased Levels of Serum IL-2R in HIV-Induced Diseases
- A. Jewett, J. V. Giorgi, and B. Bonavida 4065 Antibody-Dependent Cellular Cytotoxicity against HIV-Coated Target Cells by Peripheral Blood Monocytes from HIV Seropositive Asymptomatic Patients

Continued on page 4

- V. S. Kalyanaraman, D. M. Rausch, J. Osborne, M. Padgett, K. M. Hwang, J. D. Lifson, and L. E. Eiden 4072 Evidence by Peptide Mapping that the Region CD4(81-92) Is Involved in gp120/CD4 Interaction Leading to HIV Infection and HIV-Induced Syncytium Formation
- R. Korngold and P. J. Wettstein 4079 Immunodominance in the Graft-vs-Host Disease T Cell Response to Minor Histocompatibility Antigens
- W. Kraus, J. B. Dale, and E. H. Beachey 4089 Identification of an Epitope of Type 1 Streptococcal M Protein That is Shared with a 43-kDa Protein of Human Myocardium and Renal Glomeruli
- N. Neu, B. Ploier, and C. Öfner 4094 Cardiac Myosin-Induced Myocarditis: Heart Autoantibodies Are Not Involved in the Induction of the Disease
- C. M. Percopo, J. J. Hooks, T. Shinohara, R. Caspi, and B. Detrick 4101 Cytokine-Mediated Activation of a Neuronal Retinal Resident Cell Provokes Antigen Presentation

---

**CYTOKINES • MEDIATORS • REGULATORY MOLECULES**

---

- L. A. Bristol, F. W. Ruscetti, D. T. Brody, and S. K. Durum 4108 IL-1 $\alpha$  Induces Expression of Active Transforming Growth Factor- $\beta$  in Non-proliferating T Cells via a Post-Transcriptional Mechanism
- D. Donati, C. T. Baldari, G. Macchia, A. Massone, J. L. Telford, and L. Parente 4115 Induction of Gene Expression by IL-1 in NIH 3T3 Cells: Possible Requirement of Protein Kinase C Activity and Independence from Arachidonic Acid Metabolism
- H. Futami, R. Jansen, M. J. Macphee, J. Keller, K. McCormick, D. L. Longo, J. J. Oppenheim, F. W. Ruscetti, and R. H. Wiltrout 4121 Chemoprotective Effects of Recombinant Human IL-1 $\alpha$  in Cyclophosphamide-Treated Normal and Tumor-Bearing Mice: Protection from Acute Toxicity, Hematologic Effects, Development of Late Mortality, and Enhanced Therapeutic Efficacy
- M. Honda, K. Kitamura, T. Takeshita, K. Sugamura, and T. Tokunaga 4131 Identification of a Soluble IL-2 Receptor  $\beta$ -Chain from Human Lymphoid Cell Line Cells
- D. L. Jankovic, A. Rebollo, A. Kumar, M. Gibert, and J. Thèze 4136 IL-2-Dependent Proliferation of Murine T Cells Requires Expression of Both the p55 and p70 Subunits of the IL-2 Receptor
- D. L. Lacey and J. M. Erdmann 4145 IL-1 and IL-4 Modulate IL-1 Receptor Expression in a Murine T Cell Line
- K. L. MacNaul, N. I. Hutchinson, J. N. Parsons, E. K. Bayne, and M. J. Tocci 4154 Analysis of IL-1 and Tumor Necrosis Factor- $\alpha$  Gene Expression in Human Rheumatoid Synoviocytes and Normal Monocytes by in Situ Hybridization
- I. A. MacNeil, T. Suda, K. W. Moore, T. R. Mosmann, and A. Zlotnik 4167 IL-10, a Novel Growth Cofactor for Mature and Immature Thymocytes
- N. Manchanda and B. S. Schwartz 4174 Lipopolysaccharide-Induced Modulation of Human Monocyte Urokinase Production and Activity
- P. Seckinger, J. Klein-Nulend, C. Alander, R. C. Thompson, J. Dayer, and L. G. Raisz 4181 Natural and Recombinant Human IL-1 Receptor Antagonists Block the Effects of IL-1 on Bone Resorption and Prostaglandin Production
- H. F. Starnes, Jr., M. K. Pearce, A. Tewari, J. H. Yim, J.-C. Zou, and J. S. Abrams 4185 Anti-IL-6 Monoclonal Antibodies Protect against Lethal *Escherichia coli* Infection and Lethal Tumor Necrosis Factor- $\alpha$  Challenge in Mice
- J. P. Turunen, P. Mattila, and R. Renkonen 4192 cAMP Mediates IL-1-Induced Lymphocyte Penetration through Endothelial Monolayers

---

**IMMUNOCHEMISTRY**

---

- F. G. Cosio, S. Xiao-Ping, D. J. Birmingham, M. van Aman, and L. A. Hebert 4198 Evaluation of the Mechanisms Responsible for the Reduction in Erythrocyte Complement Receptors when Immune Complexes Form in Vivo in Primates
- S. V. Kaveri, C. Kang, and H. Köhler 4207 Natural Mouse and Human Antibodies Bind to a Peptide Derived from a Germline V<sub>H</sub> Chain: Evidence for Evolutionary Conserved Self-Binding Locus
- M. Léonetti, L. Pillet, B. Maillère, H. Lamthanh, P. Frachon, J. Couderc, and A. Ménez 4214 Immunization with a Peptide Having Both T Cell and Conformationally Restricted B Cell Epitopes Elicits Neutralizing Antisera against a Snake Neurotoxin
- A. J. Porges, T. Ng, and W. H. Reeves 4222 Antigenic Determinants of the Ku (p70/p80) Autoantigen are Poorly Conserved between Species

Continued from page 4

- A. Puccetti, P. Migliorini, J. Sabbaga, and M. P. Madaio 4229 Human and Murine Anti-DNA Antibodies Induce the Production of Anti-Idiotypic Antibodies with Autoantigen-Binding Properties (Epibodies) through Immune-Network Interactions
- D. A. Sullivan, R. S. Kelleher, J.-P. Vaerman, and L. E. Hann 4238 Androgen Regulation of Secretory Component Synthesis by Lacrimal Gland Acinar Cells in Vitro

---

#### IMMUNOPHARMACOLOGY

---

- L. R. Ballou, S. C. Barker, A. E. Postlethwaite, and A. H. Kang 4245 Sphingosine Potentiates IL-1-Mediated Prostaglandin E<sub>2</sub> Production in Human Fibroblasts
- K. Jozaki, A. Kuriu, N. Waki, S. Adachi, A. Yamatodani, S. Tarui, and Y. Kitamura 4252 Proliferative Potential of Murine Peritoneal Mast Cells after Degranulation Induced by Compound 48/80, Substance P, Tetradecanoylphorbol Acetate, or Calcium Ionophore A23187
- C. Mao, G. Merlin, R. Ballotti, M. Metzler, and M. Aguet 4257 Rapid Increase of the Human IFN- $\gamma$  Receptor Phosphorylation in Response to Human IFN- $\gamma$  and Phorbol Myristate Acetate: Involvement of Different Serine/Threonine Kinases
- L. Varesio, M. Clayton, E. Blasi, R. Ruffman, and D. Radzioch 4265 Picolinic Acid, a Catabolite of Tryptophan, as the Second Signal in the Activation of IFN- $\gamma$ -Primed Macrophages
- I. Vitté-Mony, R. Stancou, and J. H. Bertoglio 4272 Functional Consequences of cAMP Accumulation in Human Natural Killer Cells: Implications for IL-2 and IL-4 Signal Transduction

---

#### MICROBIAL IMMUNOLOGY

---

- V. Bengualid, V. B. Hatcher, B. Diamond, E. A. Blumberg, and F. D. Lowy 4279 *Staphylococcus aureus* Infection of Human Endothelial Cells Potentiates Fc Receptor Expression
- S. Frankenburg, V. Leibovici, N. Mansbach, S. J. Turco, and G. Rosen 4284 Effect of Glycolipids of *Leishmania* Parasites on Human Monocyte Activity: Inhibition by Lipophosphoglycan
- S. J. Green, R. M. Crawford, J. T. Hockmeyer, M. S. Meltzer, and C. A. Nacy 4290 *Leishmania major* Amastigotes Initiate the L-Arginine-Dependent Killing Mechanism in IFN $\gamma$ -Stimulated Macrophages by Induction of Tumor Necrosis Factor- $\alpha$
- G.-E. Kwan-Lim, K. P. Forsyth, and R. M. Maizels 4298 Filarial-Specific IgG4 Response Correlates with Active *Wuchereria bancrofti* Infection
- F. Y. Liew, Y. Li, and S. Millott 4306 Tumor Necrosis Factor- $\alpha$  Synergizes with IFN- $\gamma$  in Mediating Killing of *Leishmania major* through the Induction of Nitric Oxide
- S. M. Puentes, R. P. Da Silva, D. L. Sacks, C. H. Hammer, and K. A. Joiner 4311 Serum Resistance of Metacyclic Stage *Leishmania major* Promastigotes Is Due to Release of C5b-9
- F. Schödel, D. R. Milich, and H. Will 4317 Hepatitis B Virus Nucleocapsid/pre-S2 Fusion Proteins Expressed in Attenuated *Salmonella* for Oral Vaccination

---

#### MOLECULAR BIOLOGY • MOLECULAR GENETICS

---

- M. Amiot 4322 Identification and Analysis of cDNA Clones Encoding CD53: A Pan-Leukocyte Antigen Related to Membrane Transport Proteins
- K. L. Bost, B. L. Clarke, J. Xu, H. Kiyono, J. R. McGhee, and D. Pascual 4326 Modulation of IgM Secretion and H Chain mRNA Expression in CH12.LX.C4.5F5 B Cells by Adrenocorticotrophic Hormone
- A. Helmborg, R. Fässler, S. Geley, K. Jöhrer, G. Kroemer, G. Böck, and R. Kofler 4332 Glucocorticoid-Regulated Gene Expression in the Immune System: Analysis of Glucocorticoid-Regulated Transcripts from the Mouse Macrophage-Like Cell Line P388D1
- C. Szostecki, H. H. Guldner, H. J. Netter, and H. Will 4338 Isolation and Characterization of cDNA Encoding a Human Nuclear Antigen Predominantly Recognized by Autoantibodies from Patients with Primary Biliary Cirrhosis
- S. E. Tong-Starksen, T. M. Welsh, and B. M. Peterlin 4348 Differences in Transcriptional Enhancers of HIV-1 and HIV-2: Response to T Cell Activation Signals

Continued on page 6

Continued from page 5

V. E. Valge-Archer, J. de Villiers, A. J. Sinskey, and A. Rao 4355 Transformation of T Lymphocytes by the *v-fos* Oncogene

---

TUMOR IMMUNOLOGY

---

|  |      |   |
|--|------|---|
| K. Hellstrand, A. Asea, and S. Hermodsson  | 4365 | Role of Histamine in Natural Killer Cell-Mediated Resistance against Tumor Cells  |
| K. Takahashi, T. Nakamura, M. Koyanagi, K. Kato, Y. Hashimoto, H. Yagita, and K. Okumura | 4371 | A Murine Very Late Activation Antigen-Like Extracellular Matrix Receptor Involved in CD2- and Lymphocyte Function-Associated Antigen-1-Independent Killer-Target Cell Interaction |
| Author Index   | 4380 |   |
| Ad Hoc Reviewers   | 4382 |   |
| Author Index to Volume 145   | 4387 |   |
| Subject Index to Volume 145  | 4397 |   |