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Eğitim Bilgileri

Doktora, Brandeis University, Faculty of Arts and Sciences, Biology Department, Amerika Birleşik Devletleri 1991 - 1998

Lisans, Hamilton College, Biology, Amerika Birleşik Devletleri 1987 - 1991

Yabancı Diller

İngilizce, C1 İleri

Araştırma Alanları

İmmünoloji ve Romatoloji, Yapısal Biyofizik, Moleküler Biyokimya, Yapısal Biyoloji, Endüstriyel Biyoteknoloji, İmmünoloji, Genetik Bozuklukların Moleküler Biyolojisi, Genetik Mühendisliği, Genomiks, Hayvan Moleküler Genetiği, Kanser Moleküler Biyolojisi, Protein Mühendisliği

Akademik Unvanlar / Görevler

Prof. Dr., Boğaziçi Üniversitesi, Faculty of Arts and Sciences, Department of Molecular Biology and Genetics, 2021 - 2024

Prof. Dr., Sabancı Üniversitesi, Faculty of Engineering and Natural Sciences, Molecular Biology, Genetics and Bioengineering, 2015 - 2021

Doç. Dr., Sabancı Üniversitesi, Faculty of Engineering and Natural Sciences, Molecular Biology, Genetics and Bioengineering, 2005 - 2015

Akademik İdari Deneyim

Anabilim/Bilim Dalı Başkanı, Boğaziçi Üniversitesi, Faculty of Arts and Sciences, Molecular Biology and Genetics, 2022 - 2024

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Evaluation of Clinical and Immunological Alterations Associated with ICF Syndrome**
Bilgic Eltan S., Nain E., Catak M. C., Ezen E., Sefer A. P., Karimi N., KIYKIM A., Kolukisa B., Baser D., Bulutoglu A., et al.
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- II. **Dimerization choice and alternative functions of ZBTB transcription factors**
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FEBS JOURNAL, cilt.291, sa.2, ss.237-255, 2024 (SCI-Expanded)
- III. **Expression and characterization of recombinant IL-1Ra in *Aspergillus oryzae* as a system**
Azar L. M., KARAMAN E., Beyaz B., Goktan I., Eyupoglu A. E., Kizilel S., ERMAN M. B., Guel A., UYSAL S.
BMC BIOTECHNOLOGY, cilt.23, sa.1, 2023 (SCI-Expanded)
- IV. **Human ACE2 orthologous peptide sequences show better binding affinity to SARS-CoV-2 RBD domain: Implications for drug design**
Azar L. M., Oncel M. M., KARAMAN E., Soysal L. F., FATIMA A., Choi S. B., Eyupoglu A. E., ERMAN M. B., KHAN M. A., UYSAL S.
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- V. **Sibling rivalry among the ZBTB transcription factor family: homodimers versus heterodimers**
Piepoli S., Barakat S., Nogay L., Simsek B., Akkose U., Taskiran H., Tolay N., Gezen M., Yesilada C. Y., Tuncay M., et al.
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- VI. **Targeting mitochondrial DNA polymerase gamma for selective inhibition of MLH1 deficient colon cancer growth**
Somuncu B., Ekmekcioglu A., Antmen F. M., Ertuzun T., Deniz E., Keskin N., Park J., Yazici I. E., Simsek B., Erman B., et al.
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- VII. **Reversal of the T cell immune system reveals the molecular basis for T cell lineage fate determination in the thymus**
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NATURE IMMUNOLOGY, cilt.23, sa.5, ss.731-742, 2022 (SCI-Expanded)
- VIII. **Nanobodies as molecular imaging probes**
Barakat S., Berksoz M., Zahedimaram P., Piepoli S., ERMAN M. B.
FREE RADICAL BIOLOGY AND MEDICINE, cilt.182, ss.260-275, 2022 (SCI-Expanded)
- IX. **Sibling rivalry among the ZBTB transcription factor family: homo vs heterodimerization**
Piepoli S., Akkose U., Nogay L., Taskiran H., Tolay N., Gezen M., Adebali O., Atilgan C., ERMAN M. B.
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- X. **The mechanism of LRBA dependent CTLA-4 surface expression in regulatory T cell lymphocytes**
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- XI. **Synchronous and Asynchronous Response in Dynamically Perturbed Proteins**
Hacisuleyman A., Erkip A., ERMAN M. B., Erman B.
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- XII. **Structural analysis of the PATZ1 BTB domain homodimer**
Piepoli S., Alt A. O., Atilgan C., Mancini E. J., ERMAN M. B.
ACTA CRYSTALLOGRAPHICA SECTION D-STRUCTURAL BIOLOGY, cilt.76, ss.581-593, 2020 (SCI-Expanded)
- XIII. **Engineering antigen-specific natural killer cells against the melanoma-associated antigen tyrosinase via TCR gene transfer.**
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CANCER IMMUNOLOGY RESEARCH, sa.4, ss.49-50, 2020 (SCI-Expanded)
- XIV. **p53 regulates katanin-p60 promoter in HCT 116 cells**
Kirimtay K., Selcuk E., Kelle D., ERMAN M. B., Karabay Korkmaz A.
GENE, cilt.727, 2020 (SCI-Expanded)
- XV. **Doxorubicin inhibits miR-140 expression and upregulates PD-L1 expression in HCT116**

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Naba N. M., Tolay N., ERMAN M. B., Sayı Yazgan A.

TURKISH JOURNAL OF BIOLOGY, cilt.44, sa.1, ss.15-23, 2020 (SCI-Expanded)

- XVI. **The fungal metabolite chaetocin is a sensitizer for pro-apoptotic therapies in glioblastoma**
Ozyerli-Goknar E., Sur-Erdem I., Seker F., CİNGÖZ A., Kayabolen A., Kahya-Yesil Z., Uyulur F., Gezen M., Tolay N., ERMAN M. B., et al.
CELL DEATH & DISEASE, cilt.10, 2019 (SCI-Expanded)
- XVII. **Approaches to functionally validate candidate genetic variants involved in colorectal cancer predisposition**
Bonjoch L., Mur P., Arnau-Collell C., Vargas-Parra G., Shamloo B., Franch-Exposito S., Pineda M., Capella G., ERMAN M. B., Castellvi-Bel S.
MOLECULAR ASPECTS OF MEDICINE, cilt.69, ss.27-40, 2019 (SCI-Expanded)
- XVIII. **Engineering antigen-specific NK cell lines against the melanoma-associated antigen tyrosinase via TCR gene transfer**
Parlar A., Sayitoglu E. C., Ozkazanc D., Georgoudaki A., Pamukcu C., Aras M., Josey B. J., Chrobok M., Brannecki S., Zahedimaram P., et al.
EUROPEAN JOURNAL OF IMMUNOLOGY, sa.8, ss.1278-1290, 2019 (SCI-Expanded)
- XIX. **Identification of lineage-specifying cytokines that signal all CD8⁺-cytotoxic-lineage-fate 'decisions' in the thymus**
Etzensperger R., Kadakia T., Tai X., Alag A., Guinter T. I., Egawa T., ERMAN M. B., Singer A.
NATURE IMMUNOLOGY, cilt.18, sa.11, ss.1218-1227, 2017 (SCI-Expanded)
- XX. **Long noncoding RNA (lincRNA), a new paradigm in gene expression control**
Deniz E., ERMAN M. B.
FUNCTIONAL & INTEGRATIVE GENOMICS, cilt.17, sa.2-3, ss.135-143, 2017 (SCI-Expanded)
- XXI. **Screening of new antileukemic agents from essential oils of algae extracts and computational modeling of their interactions with intracellular signaling nodes**
Ataseyer-Arslan B., Yilancioglu K., Kalkan Z., Timucin A. C., Gur H., Isik F. B., Deniz E., Erman B., Cetiner S.
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- XXII. **Antileukemic Drug Potentials of Essential Oils of Algae Extracts**
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- XXIII. **PATZ1 Is a DNA Damage-Responsive Transcription Factor That Inhibits p53 Function**
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- XXIV. **Oxidative Stress Is a Mediator for Increased Lipid Accumulation in a Newly Isolated *Dunaliella salina* Strain**
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- XXV. **Foxp3 Transcription Factor Is Proapoptotic and Lethal to Developing Regulatory T Cells unless Counterbalanced by Cytokine Survival Signals**
Tai X., ERMAN M. B., Alag A., Mu J., Kimura M., Katz G., Guinter T., McCaughtry T., Etzensperger R., Feigenbaum L., et al.
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- XXVI. **Effects of micro environmental factors on natural killer activity (NK) of Beta Thalassemia major patients**
Arslan B. A., Erdem-Kuruca S., KARAKAŞ Z., ERMAN M. B., ERGEN H. A.
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- XXVII. **Cd81 Interacts with the T Cell Receptor to Suppress Signaling**
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- XXVIII. **Conditional deletion of cytokine receptor chains reveals that IL-7 and IL-15 specify CD8 cytotoxic**

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XXIX. CD8 Lineage-specific Regulation of Interleukin-7 Receptor Expression by the Transcriptional Repressor Gfi1

Ligons D. L., Tuncer C., Linowes B. A., Akcay I. M., Kurtulus S., Deniz E., Arslan B. A., Cevik S. I., Keller H. R., Luckey M. A., et al.

JOURNAL OF BIOLOGICAL CHEMISTRY, cilt.287, sa.41, ss.34386-34399, 2012 (SCI-Expanded)

XXX. Coreceptor gene imprinting governs thymocyte lineage fate

Adoro S., McCaughy T., ERMAN M. B., Alag A., Van Laethem F., Park J., Tai X., Kimura M., Wang L., Grinberg A., et al. EMBO JOURNAL, cilt.31, sa.2, ss.366-377, 2012 (SCI-Expanded)

XXXI. Signaling by intrathymic cytokines, not T cell antigen receptors, specifies CD8 lineage choice and promotes the differentiation of cytotoxic-lineage T cells

Park J., Adoro S., Guintier T., ERMAN M. B., Alag A. S., Catalfamo M., Kimura M. Y., Cui Y., Lucas P. J., Gress R. E., et al. NATURE IMMUNOLOGY, cilt.11, sa.3, ss.257-264, 2010 (SCI-Expanded)

XXXII. Interleukin 7 signaling in dendritic cells regulates the homeostatic proliferation and niche size of CD4⁺ T cells

Guimond M., Veenstra R. G., Grindler D. J., Zhang H., Cui Y., Murphy R. D., Kim S. Y., Na R., Hennighausen L., Kurtulus S., et al.

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XXXIII. Targeting CD4 Coreceptor Expression to Postselection Thymocytes Reveals That CD4/CD8 Lineage Choice Is neither Error-Prone nor Stochastic

Adoro S., ERMAN M. B., Sarafova S. D., Van Laethem F., Park J., Feigenbaum L., Singer A.

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XXXIV. 'Coreceptor tuning': cytokine signals transcriptionally tailor CD8 coreceptor expression to the self-specificity of the TCR

Park J., Adoro S., Lucas P. J., Sarafova S. D., Alag A. S., Doan L. L., ERMAN M. B., Liu X., Ellmeier W., Bosselut R., et al. NATURE IMMUNOLOGY, cilt.8, sa.10, ss.1049-1059, 2007 (SCI-Expanded)

XXXV. Coreceptor signal strength regulates positive selection but does not determine CD4/CD8 lineage choice in a physiologic in vivo model

ERMAN M. B., Alag A. S., Dahle O., van Laethem F., Sarafova S. D., Guintier T. I., Sharrow S. O., Grinberg A., Love P. E., Singer A.

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XXXVI. Cytokine signal transduction is suppressed in preselection double-positive thymocytes and restored by positive selection

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XXXVII. Modulation of coreceptor transcription during positive selection dictates lineage fate independently of TCR/coreceptor specificity

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XXXVIII. IL-7 receptor signals inhibit expression of transcription factors TCF-1, LEF-1, and ROR γ t: Impact on thymocyte development

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XXXIX. Suppression of IL7R α transcription by IL-7 and other prosurvival cytokines: A novel mechanism for maximizing IL-7-dependent T cell survival

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- XL. **Defined $\alpha\beta$ T cell receptors with distinct ligand specificities do not require those ligands to signal double negative thymocyte differentiation**
ERMAN M. B., Guintert T., Singer A.
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- XLI. **In vitro evidence that cytokine receptor signals are required for differentiation of double positive thymocytes into functionally mature CD8⁺ T cells**
Yu Q., ERMAN M. B., Bhandardola A., Sharrow S., Singer A.
JOURNAL OF EXPERIMENTAL MEDICINE, cilt.197, sa.4, ss.475-487, 2003 (SCI-Expanded)
- XLII. **Early TCR α expression generates TCR complexes that signal the DN-to-DP transition and impair development**
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- XLIII. **Transcriptional activation by ETS and leucine zipper-containing basic helix-loop-helix proteins**
Tian G., Erman B., Ishii H., Gangopadhyay S., Sen R.
MOLECULAR AND CELLULAR BIOLOGY, cilt.19, sa.4, ss.2946-2957, 1999 (SCI-Expanded)
- XLIV. **ETS-core binding factor: a common composite motif in antigen receptor gene enhancers**
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- XLV. **Context dependent transactivation domains activate the immunoglobulin mu heavy chain gene enhancer**
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EMBO JOURNAL, cilt.15, sa.17, ss.4665-4675, 1996 (SCI-Expanded)
- XLVI. **REGULATION OF LYMPHOID-SPECIFIC IMMUNOGLOBULIN-MU HEAVY-CHAIN GENE ENHANCER BY ETS-DOMAIN PROTEINS**
NELSEN B., TIAN G., ERMAN B., GREGOIRE J., MAKI R., GRAVES B., SEN R.
SCIENCE, sa.5117, ss.82-86, 1993 (SCI-Expanded)
- XLVII. **INFORMATION-THEORETICAL ENTROPY AS A MEASURE OF SEQUENCE VARIABILITY**
SHENKIN P., ERMAN B., MASTRANDREA L.
PROTEINS-STRUCTURE FUNCTION AND GENETICS, cilt.11, sa.4, ss.297-313, 1991 (SCI-Expanded)

Diğer Dergilerde Yayınlanan Makaleler

- I. **Structure and Function of the LRBA Protein**
Ezen E., Catak M. C., Catak F. B., Piepoli S., Zahedimaram P., Ultanir E., Barış S., Erman B.
TURKISH JOURNAL OF IMMUNOLOGY, ss.37-46, 2024 (ESCI)
- II. **Molecular Biology of SARS-CoV-2**
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TURKISH JOURNAL OF IMMUNOLOGY, cilt.8, sa.2, ss.73-88, 2020 (ESCI)
- III. **Nanocomposite Bioinks Based on Agarose and 2D Nanosilicates with Tunable Flow Properties and Bioactivity for 3D Bioprinting**
Nadernezhad A., Caliskan O. S., Topuz F., Afghah F., ERMAN M. B., Koc B.
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Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Isolation and characterization of nanobodies that bind the BTB domain of the PATZ1 transcription factor**
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6th European Congress of Immunology (ECI), ELECTR NETWORK, 1 - 04 Eylül 2021, ss.412

- II. **Identification and strategic targeting of key anti-viral defense mechanisms in Natural Killer cells**
Sayitoglu E. C., Ozkazanc D., Sarac A., Parlar A., Alici E., ERMAN M. B., Duru A. D., SÜTLÜ T.
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- III. **Engineering antigen-specific NK cells via TCR gene transfer: A novel source for adoptive immunotherapy**
Parlar A., Pamukcu C., Ozkazanc D., Aras M., Dahlberg C., Chrobok M., Zahedimaram P., Ikromzoda L., Sayitoglu E. C., Alici E., et al.
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- IV. **Editing of Long Noncoding RNA DANCER Gene Locus Using Genetic Engineering Tools**
Baran G., Talug B., Keskin N., TOKCAER KESKİN Z., ERMAN M. B., Deniz E.
21st National Biomedical Engineering Meeting (BIYOMUT), İstanbul, Türkiye, 24 Kasım - 26 Aralık 2017
- V. **Characterization of PATZ1 protein structure and its interaction with the tumor suppressor protein p53**
Piepoli S., ERMAN M. B., Atilgan C.
41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Türkiye, 3 - 08 Eylül 2016, ss.84
- VI. **Innate immune sensors restrict lentiviral gene delivery to human natural killer cells: novel perspectives on the use of viral vectors**
Sayitoglu E. C., Duru A. D., Chrobok M., Chiang C., Parlar A., Senturk G. H., Erman B., Alici E., Sutlu T.
Collaborative Congress of the European-Society-of-Gene-and-Cell-Therapy (ESGCT) and Finnish-Society-of-Gene-Therapy (FSGT), Helsinki, Finlandiya, 17 - 20 Eylül 2015
- VII. **NATURAL KILLER ACTIVITY AND EFFECT OF IL-2 IN PATIENTS WITH β -THALASSEMIA MAJOR**
KARAKAŞ Z., Atasever B., Kuruca S. E., ERMAN M. B., ERGEN H. A., Isbir T., Agaoglu L.
14th Annual Meeting of the European-Hematology-Association, Berlin, Almanya, 4 - 07 Haziran 2009, ss.502
- VIII. **PHENOTYPIC AND FUNCTIONAL STUDIES OF NATURAL KILLER (NK) CELL SUBSETS IN β -THALASSEMIA MAJOR PATIENTS**
Atasever B., Kuruca S. E., KARAKAŞ Z., ERMAN M. B., ERGEN H. A., Isbir T., Gunal G.
14th Annual Meeting of the European-Hematology-Association, Berlin, Almanya, 4 - 07 Haziran 2009, ss.500-501
- IX. **Coreceptor tuning: IL-7 signals transcriptionally tailor CD8 coreceptor expression in CD8 T cells to the self-specificity of their TCR**
Park J., Adoro S., Lucas P. J., Sarafova S. D., Alag A., Doan L. L., ERMAN M. B., Liu X., Ellmeier W., Bosselut R., et al.
15th Annual Meeting of the International-Cytokine-Society, San-Francisco, Kostarika, 26 - 30 Ekim 2007, ss.32

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Müftüoğlu M., ERMAN M. B., Novel Dna Polymerase Gamma Inhibitor and Uses Thereof, Patent, BÖLÜM A İnsan İhtiyaçları, Buluşun Tescil No: EP18880072.6 , Standart Tescil, 2024

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Metrikler

Yayın: 59

Atıf (WoS): 1340

Atıf (Scopus): 2662

H-İndeks (WoS): 19

H-İndeks (Scopus): 24

Akademi Dışı Deneyim

Meslek Birlięi, Moleküler Biyoloji Derneęi, Moleküler Biyoloji Derneęi