

## Asst. Prof. AYSUN ADAN

### Personal Information

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### Education Information

Doctorate, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Ve Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik, Turkey 2010 - 2015

Postgraduate, İzmir Yüksek Teknoloji Enstitüsü, Mühendislik Ve Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik, Turkey 2006 - 2010

Undergraduate, Ege Üniversitesi, Fen Fakültesi, Biyoloji Bölümü/Temel Ve Endüstriyel Mikrobiyoloji Anabilim Dalı, Turkey 2001 - 2006

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, THERAPEUTIC POTENTIALS OF Fisetin, Hesperetin and Vitexin on Chronic Myeloid Leukemia and Acute Myeloid Leukemia Cells, İzmir Yüksek Teknoloji Enstitüsü, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2015

Postgraduate, ISOLATION AND IDENTIFICATION OF A Lipase Producing Psychrotrophic Bacteria from Soil: Cloning and Partial Characterization of its Lipase, İzmir Yüksek Teknoloji Enstitüsü, Fen Fakültesi, Moleküler Biyoloji Ve Genetik, 2009

### Research Areas

Life Sciences, Molecular Biology and Genetics, Molecular Biology of Cancer, Natural Sciences

### Academic Titles / Tasks

Assistant Professor, Abdullah Gül Üniversitesi, Yaşam ve Doğa Bilimleri Fakültesi, Moleküler Biyoloji ve Genetik, 2018 - Continues

Assistant Professor, Abdullah Gül Üniversitesi, Yaşam ve Doğa Bilimleri Fakültesi, Moleküler Biyoloji ve Genetik, 2015 - 2018

Research Assistant, İzmir Yüksek Teknoloji Enstitüsü, Fen Bilimleri Enstitüsü, Moleküler Biyoloji Ve Genetik, 2007 - 2015

### Courses

Gene Regulation, Undergraduate, 2020 - 2021

General Biology I, Undergraduate, 2020 - 2021

Cancer Biology, Undergraduate, 2020 - 2021  
Kanser Biyolojisi ve Tedavisi, Postgraduate, 2016 - 2017  
Biology for Bioengineers, Undergraduate, 2016 - 2017  
Science of Nature, Undergraduate, 2014 - 2015

## Advising Theses

Adan A., The role of ceramide metabolism in apoptosis triggered by resveratrol and the therapeutic potential of resveratrol in Ph+ acute lymphoblastic leukemia, Postgraduate, O.ÖĞÜZ(Student), 2020

## Designed Lessons

Adan A., Cancer Biology, Undergraduate, 2020 - 2021  
Adan A., Gene Regulation, Undergraduate, 2019 - 2020  
Adan A., General Biology I, Undergraduate, 2018 - 2019  
Adan A., FOOD AND HEALTH, Undergraduate, 2017 - 2018  
Adan A., CANCER BIOLOGY AND TREATMENT, Postgraduate, 2016 - 2017

## Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Involvement of Sphingolipid Metabolism Enzymes in Resveratrol-Mediated Cytotoxicity in Philadelphia-Positive Acute Lymphoblastic Leukemia**  
Oğuz O., Adan A.  
NUTRITION AND CANCER-AN INTERNATIONAL JOURNAL, 2021 (Journal Indexed in SCI)
- II. **Computational analysis of microRNA-mediated interactions in SARS-CoV-2 infection**  
SAÇAR DEMİRCİ M. D. , ADAN A.  
PEERJ, vol.8, 2020 (Journal Indexed in SCI)
- III. **A minimally invasive transfer method of mesenchymal stem cells to the intact periodontal ligament of rat teeth: a preliminary study**  
GÜL AMUK N., Kurt G., Kartal Yandim M., Adan A., BARAN Y.  
TURKISH JOURNAL OF BIOLOGY, vol.42, no.5, pp.382-391, 2018 (Journal Indexed in SCI)
- IV. **Effects of cell-mediated osteoprotegerin gene transfer and mesenchymal stem cell applications on orthodontically induced root resorption of rat teeth**  
AMUK N., KURT G., BARAN Y., SEYRANTEPE V., YANDIM M., ADAN A., DEMİR S., KIRAZ Y., SONMEZ M.  
EUROPEAN JOURNAL OF ORTHODONTICS, pp.1-8, 2016 (Journal Indexed in SCI)
- V. **Major apoptotic mechanisms and genes involved in apoptosis**  
KIRAZ Y., ADAN A., Yandim M. K. , BARAN Y.  
TUMOR BIOLOGY, vol.37, no.7, pp.8471-8486, 2016 (Journal Indexed in SCI)
- VI. **Intraperitoneal mesenchymal stem cell administration ameliorates allergic rhinitis in the murine model**  
IŞIK S., KARAMAN M., ADAN A., KIRAY M., BAĞRIYANIK H., SÖZMEN Ş., KOZANOĞLU İ., KARAMAN Ö., BARAN Y., UZUNER N.  
EUROPEAN ARCHIVES OF OTO-RHINO-LARYNGOLOGY, vol.274, no.1, pp.197-207, 2016 (Journal Indexed in SCI Expanded)
- VII. **Fisetin and hesperetin induced apoptosis and cell cycle arrest in chronic myeloid leukemia cells accompanied by modulation of cellular signaling**  
ADAN A., BARAN Y.  
TUMOR BIOLOGY, vol.37, no.5, pp.5781-5795, 2016 (Journal Indexed in SCI)

- VIII. **Flow cytometry: basic principles and applications**  
ADAN A., ALIZADA G., KIRAZ Y., BARAN Y., NALBANT A.  
CRITICAL REVIEWS IN BIOTECHNOLOGY, vol.37, no.2, pp.163-176, 2016 (Journal Indexed in SCI)
- IX. **Cell Proliferation and Cytotoxicity Assays**  
ADAN A., KIRAZ Y., BARAN Y.  
CURRENT PHARMACEUTICAL BIOTECHNOLOGY, vol.17, no.14, pp.1213-1221, 2016 (Journal Indexed in SCI)
- X. **The pleiotropic effects of fisetin and hesperetin on human acute promyelocytic leukemia cells are mediated through apoptosis, cell cycle arrest, and alterations in signaling networks**  
ADAN A., BARAN Y.  
TUMOR BIOLOGY, vol.36, no.11, pp.8973-8984, 2015 (Journal Indexed in SCI)
- XI. **Nilotinib Does Not Alter the Secretory Functions of Carotid Artery Endothelial Cells in a Prothrombotic or Antithrombotic Fashion**  
Katgi A., Sevindik O. G. , Gokbulut A., Ozsan G. H. , Yuksel F., Solmaz S. M. , Alacacioglu I., Ozcan M. A. , Demirkan F., Baran Y., et al.  
CLINICAL AND APPLIED THROMBOSIS-HEMOSTASIS, vol.21, no.7, pp.678-683, 2015 (Journal Indexed in SCI)
- XII. **Revealing genome-wide mRNA and microRNA expression patterns in leukemic cells highlighted "hsa-miR-2278" as a tumor suppressor for regain of chemotherapeutic imatinib response due to targeting STAT5A**  
Kaymaz B. T. , Gunel N. S. , Ceyhan M., Cetintas V. B. , Ozel B., Yandim M. K. , Kipcak S., Aktan C., Gokbulut A., Baran Y., et al.  
TUMOR BIOLOGY, vol.36, no.10, pp.7915-7927, 2015 (Journal Indexed in SCI)
- XIII. **A Novel Natural Product, KL-21, Inhibits Proliferation and Induces Apoptosis in Chronic Lymphocytic Leukemia Cells**  
ADAN A., YAŞAR M., BARAN Y.  
TURKISH JOURNAL OF HEMATOLOGY, vol.32, no.2, pp.118-126, 2015 (Journal Indexed in SCI Expanded)

### Articles Published in Other Journals

- I. **Glucosylceramide Synthase Is a Novel Biomarker of Midostaurin-Induced Cytotoxicity in Non-Mutant FLT3 Positive Acute Myeloid Leukemia Cells**  
Şahin H. N. , Adan A.  
EXPERIMED, vol.11, no.3, pp.149-155, 2021 (National Refreed University Journal)
- II. **Cytotoxic Effects of Resveratrol and Its Combinations with Ceramide Metabolism Inhibitors on FLT3 Positive Acute Myeloid Leukemia**  
Ersöz N. Ş. , Adan A.  
Erzincan Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.13, no.3, pp.1205-1216, 2020 (National Refreed University Journal)

### Books & Book Chapters

- I. **Pleiotropic Molecular Effects of Dietary Polyphenols Resveratrol and Apigenin in Leukemia**  
Adan A., Oğuz O.  
in: Polyphenols in Human Health and Disease, Ronald Ross Watson, Victor R. Preedy, Sherma Zibadi, Editor, AP, London , London, pp.152-162, 2018
- II. **Kanserde Sfingolipidler**  
Adan A.  
in: Kanser Moleküler Biyolojisi, Yusuf Baran, Editor, Kısayol yayıncılık, Ankara, pp.260-276, 2018
- III. **Meme Kanserine Moleküler Biyolojik Yaklaşım**  
Adan A.

## Refereed Congress / Symposium Publications in Proceedings

- I. **Resveratrol Induced Growth Inhibition in Human Ph Acute Lymphoblastic Leukemia By Modulation of Sphingolipid Mechanism**  
ADAN A.  
13th World Congress on Polyphenol Applications, 30 September - 01 October 2019
- II. **Lösemi Hücrelerinde STAT3'ün Hedeflenmesi Metabolik Potansiyel Değişimi ile Glikolizi Modüle Eder**  
TEZCANLI KAYMAZ B., ABBASZADE Z., ÖZATEŞ AY N. P. , GÜMÜŞ N., ADAN A., BARAN Y., SELVİ GÜNEL N., BİRAY AVCI Ç.  
VI.ULUSLARARASI KATILIMLIDENEYSSEL HEMATOLOJİ KONGRESİ, 19 - 21 April 2019
- III. **Effects of cell-mediated osteoprotegerin gene transfer and mesenchymal stem cell applications on orthodontically induced root resorption of rat teeth**  
GÜL AMUK N., KURT G., BARAN Y., SEYRANTEPE V., KARTAL YANDIM M., ADAN A., DEMİR AKYILDIZ S., KIRAZ Y., SÖNMEZ M. F.  
94th Congress of the European Orthodontic Society, Edinburgh, Saint Helena, 17 - 21 June 2018, vol.40, pp.455
- IV. **Synergistic Cytotoxic Effects of Resveratrol in Combination with Ceramide Metabolizing Enzymes in Ph Acute Lymphoblastic Leukemia**  
OĞUZ O., ADAN A.  
The 2nd International Conference on Natural Products for Cancer Prevention and Therapy, 8 November - 11 December 2017, vol.1, pp.984
- V. **Fisetin and hesperetin induced apoptosis and cell cycle arrest in chronic myeloid leukemia cells accompanied by modulation of cellular signaling**  
ADAN A., BARAN Y.  
11th World Congress on Polyphenols Applications: Vienna Polyphenols 2017, 20 - 21 June 2017
- VI. **KLL Genetiği, Sinyal İletim Yolları**  
ADAN A.  
IV. Uluslararası Katılımlı Deneysel Hematoloji Kongresi, Turkey, 28 - 30 April 2017
- VII. **Lösemi Kök Hücre Biyolojisi**  
ADAN A.  
3. Uluslararası Katılımlı Deneysel Hematoloji Kongresi, Turkey, 5 - 08 May 2016
- VIII. **Multidrug resistance mechanisms in hematological malignancies**  
KIRAZ Y., ADAN A., BARAN Y.  
FRONTIERS IN SCIENTIFIC RESEARCH-TWAS, Bangalore, India, 21 - 22 December 2015, pp.1
- IX. **THE MICROARRAY GENE PROFILING ANALYSIS OF ACUTE PROMYELOCYTIC LEUKEMIA CELLS IN RESPONSE TO Fisetin AND HESPERETIN**  
ADAN A., BARAN Y.  
20TH Congress of THE European Hematology Association, Vienna, Austria, 11 June - 14 October 2015, pp.651
- X. **Multidrug Resistance Mechanisms in Leukemias**  
BARAN Y., KIRAZ Y., ADAN A.  
Future of Biomedicine Conference 2015, Vladivostok, Russia, 2 - 07 September 2015, pp.53
- XI. **Therapeutic potential of fisetin and identification of its mechanisms in action in chronic myeloid leukemia and acute promyelocytic leukemia cells**  
ADAN A., BARAN Y.  
40TH FEBS CONGRESS, Berlin, Germany, 4 - 09 July 2015, pp.241
- XII. **A GENOME-WIDE ANALYSES OF DIFFERENTIALLY EXPRESSED GENES AND RELATED NETWORKS AFFECTED BY Fisetin AND HESPERETIN IN CHRONIC MYELOID LEUKEMIA CELLS**

ADAN A., BARAN Y.

20th Congress of the European Hematology Association, Viyana, Austria, 11 - 14 June 2015, pp.686

**XIII. SPHINGOSINE-1-PHOSPHATE RECEPTOR 2/GQ/PHOSPHOLIPASE C AXIS IS A NOVEL MECHANISM TO OVERCOME NILOTINIB RESISTANCE IN T315I MUTATION EXPRESSING 32DCL3 MURINE CELLS**

ADAN A., OGRET MEN B., BARAN Y.

20TH Congress of the European Hematology Association, Viyana, Austria, 11 - 14 June 2015, pp.428

**XIV. Revealing Genome Wide mRNA and miRNA Expression Profiles in Parental and Imatinib Resistant Chronic Myeloid Leukemia Cells**

TEZCANLI KAYMAZ B., SELVİ GÜNEL N., CEYHAN M., BOZOK ÇETİNTAŞ V., KARTAL YANDIM M., ÖZEL B., KIPÇAK S., AKTAN Ç., ADAN A., BARAN Y., et al.

V. INTERNATIONAL CONGRESS OF MOLECULAR MEDICINE, İzmir, Turkey, 20 - 22 May 2015, pp.176

**XV. Targeting STAT3 has therapeutic potential to regain nilotinib response in parental and resistant chronic myeloid leukemia cells**

TEZCANLI KAYMAZ B., SELVİ GÜNEL N., BOZOK ÇETİNTAŞ V., ADAN A., BARAN Y., GÜNDÜZ C., KOSOVA CAN B. EACR-Sponsored 3rd Anticancer Agent Development Congress, İzmir, Turkey, 18 - 19 May 2015, pp.182

**XVI. OVERCOMING NILOTINIB RESISTANCE BY SPECIFIC INHIBITION OF SPHINGOSINE-1-. PHOSPHATE RECEPTOR 2/GQ/ PHOSPHOLIPASE C AXIS IN CHRONIC MYELOID LEUKEMIA**

ADAN A., OGRET MEN B., BARAN Y.

International Ceramide Conference, İzmir, Turkey, 6 - 10 May 2015, pp.85

**XVII. HESPERETİN ARACILI APOPTOZDA ROLÜ OLAN SİNYAL YOLAKLARININ AKUT MYELOİD LÖSEMİ VE KRONİK MYELOİD LÖSEMİ HÜCRELERİNDE TÜM GENOM MİKROARRAY ANALİZİ İLE SAPTANMASI**  
ADAN A., BARAN Y.

2. ULUSLARARASI KA TILIMLI DENEYSEL HEMA TOLOJİ KONGRESİ, Kayseri, Turkey, 17 - 19 April 2015, pp.10

**XVIII. FİSETİN TARAFINDAN MODÜLE EDİLEN GEN VE GENETİK YOLAKLARIN AKUT MİYELOİD LÖSEMİ VE KRONİK MYELOİD LÖSEMİ HÜCRELERİNDE TÜM GENOM MİKROARRAY ANALİZİ İLE SAPTANMASI**  
ADAN A., BARAN Y.

2. ULUSLARARASI KA TILIMLI DENEYSEL HEMA TOLOJİ KONGRESİ, Kayseri, Turkey, 17 - 19 April 2015, pp.32

## Supported Projects

ADAN A., Project Supported by Higher Education Institutions, Resveratrol'un FLT3+ Akut Miyeloid Lösemide Terapötik Potansiyeli ve Resveratrol Tarafından Tetiklenen Apoptozda Seramid Metabolizmasının Rolü, 2016 - Continues

Adan A., Aydemir L. Y. , TUBITAK Project, Biyoaktivitesi Geliştirilmiş Şeker Pancarı Yaprağı Protein Hidrolizatlarının Çift Katlı Emülsiyon İle Mikroenkapsülasyonu, 2020 - 2023

Adan A., TUBITAK Project, Deneysel FLT3-ITD Pozitif Akut Miyeloid Lösemide Sfingozin Kinaz ve Glukozil Seramid Sentazın Genetik Olarak Hedeflenmesinin Midostaurin Direncinin Geri Çevrilmesindeki Rolü, 2020 - 2021

Adan A., Association (NGO), Midostaurin Dirençli FLT3- ITD Pozitif Akut Miyeloid Lösemide Sfingozin Kinaz ve Glukozil Seramid Sentazın Direnç Gelişimindeki Rolünün Moleküler Düzeyde Araştırılması, 2020 - 2021

Adan A., TUBITAK Project, Resveratrol'un Ph+ Akut Lenfoblastik Lösemide Terapötik Potansiyeli ve Resveratrol Tarafından Tetiklenen Apoptozda Seramid Metabolizmasının Rolü, 2016 - 2019

## Citations

Total Citations (WOS):340

h-index (WOS):6

## Scholarships

## Awards

Adan A., Ersöz N. Ş. , Oral Presentation Award, 3Nd International Conference On Natural Products For Cancer Prevention And Therapy, December 2019

Adan A., Gül Amuk N., The Beni Solow award 2017, European Journal Of Orthodontics, July 2017

ADAN A., Seyehat Tam Destek Ödülü, ICGEB, November 2016

ADAN A., The 15th FEBS young scientists' forum, FEBS, July 2015

Adan A., Baran Y., Kiraz Y., Dr. Nejat F. Eczacıbası Medicine Award, Scientific Project Support Award, Eczacıbası Holding, June 2015

ADAN A., Travel Grant, The Sphingolipid Club, May 2015

ADAN A., En İyi Bildiri Ödülü, Deneysel Hematoloji Derneği, April 2015