

Assoc. Prof. ARZU ZEYNEP KARABAY

Personal Information

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International Researcher IDs

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Publons / Web Of Science ResearcherID: JTS-6850-2023

ScopusID: 55953375100

Yoksis Researcher ID: 172638

Research Areas

Biochemistry

Academic Titles / Tasks

Associate Professor, Ankara University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2019 - Continues

Assistant Professor, Ankara University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2014 - 2018

Research Assistant, Ankara University, Eczacılık Fakültesi, Temel Eczacılık Bilimleri Bölümü, 2003 - 2014

Courses

BIOCHEMICAL PRACTICE, Undergraduate, 2021 - 2022

Metabolik Regülasyon, Doctorate, 2021 - 2022

Klinik Biyokimya, Undergraduate, 2022 - 2023, 2018 - 2019, 2017 - 2018

Hücre kültürü uygulaması, Doctorate, 2021 - 2022, 2015 - 2016, 2014 - 2015, 2013 - 2014

Doku biyokimyası, Doctorate, 2022 - 2023

Poliakrilamid jel elektroforezi, Doctorate, 2022 - 2023

Biyokimya Uygulama, Undergraduate, 2021 - 2022, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Biochemistry 1, Undergraduate, 2022 - 2023

Hücre kültürü uygulama, Doctorate, 2021 - 2022, 2018 - 2019, 2017 - 2018, 2016 - 2017

Clinical Biochemistry, Undergraduate, 2022 - 2023, 2017 - 2018

Beslenme Biyokimyası, Undergraduate, 2022 - 2023, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016

Poliakrilamid jel elektroforezi uygulama, Doctorate, 2022 - 2023

Biochemistry 1, Undergraduate, 2022 - 2023, 2017 - 2018, 2016 - 2017

Biyokimya 2, Undergraduate, 2021 - 2022, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015

Hücre Kültürü, Doctorate, 2021 - 2022, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2014 - 2015

Hastalıkların Biyokimyasal Temelleri, Undergraduate, 2022 - 2023

Kanser biyokimyası, Doctorate, 2022 - 2023, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016, 2014 - 2015, 2013 - 2014

Metabolizma 1, Postgraduate, 2022 - 2023

Araştırma projesi 1, Undergraduate, 2022 - 2023

Araştırma projesi 2, Undergraduate, 2021 - 2022
Research Project 1, Undergraduate, 2022 - 2023
Biochemical Basis of Diseases, Undergraduate, 2022 - 2023
Nutritional Biochemistry, Undergraduate, 2022 - 2023
Ölüm nedeninin saptanmasında postmortem biyokimya, Postgraduate, 2021 - 2022
Biyokimya 1, Undergraduate, 2022 - 2023, 2018 - 2019, 2017 - 2018, 2016 - 2017, 2015 - 2016
Biochemistry 2, Undergraduate, 2021 - 2022, 2017 - 2018, 2016 - 2017
Organik Kimya ve Biyokimya, Doctorate, 2018 - 2019, 2017 - 2018, 2016 - 2017
Organik Kimya ve Biyokimya Uygulama, Doctorate, 2018 - 2019, 2017 - 2018, 2016 - 2017

Advising Theses

KARABAY A. Z., Sodyum benzoatın HCT116 kolon kanser hücrelerinde canlılık üzerine etkisi, Postgraduate,
B.YILMAZ(Student), 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Nilotinib exhibits less toxicity than imatinib and influences the immune state by modulating iNOS, p-p38 and p-JNK in LPS/IFN gamma-activated macrophages**
Karabay A. Z., Ozkan T., Koc A., Hekmatshoar Y., Gurkan-Alp A. S., Sunguroglu A.
TOXICOLOGY IN VITRO, vol.95, 2024 (SCI-Expanded)
- II. **Identification of exosomal microRNAs and related hub genes associated with imatinib resistance in chronic myeloid leukemia**
KARABAY A. Z., ÖZKAN T., KARADAĞ GÜREL A., KOÇ A., Hekmatshoar Y., SUNGUROĞLU A., AKTAN F., Buyukbingöl Z.
Naunyn-Schmiedeberg's Archives of Pharmacology, 2024 (SCI-Expanded)
- III. **Methylsulfonylmethane induces caspase-dependent apoptosis in acute myeloid leukemia cell lines**
Hekmatshoar Y., KARABAY A. Z., ÖZKAN T., KOÇ A., SUNGUROĞLU A.
Fundamental and Clinical Pharmacology, 2024 (SCI-Expanded)
- IV. **Novel indole retinoid derivative induces apoptosis and cell cycle arrest and modulates AKT and ERK signaling in HL-60 cells**
Gurkan-Alp A. S., Karabay A. Z., KOÇ A., Buyukbingöl E.
FUNDAMENTAL & CLINICAL PHARMACOLOGY, vol.37, no.3, pp.557-565, 2023 (SCI-Expanded)
- V. **Synthesis and Cytotoxicity of Some Imidazo[4,5-b]pyridine Derivatives and Their Regioselective N-Alkylation**
DOĞANÇ F., ALP M., Karabay A. Z., KOÇ A., EREN G., GÖKER A. H.
CHEMISTRYSELECT, no.7, pp.1519-1525, 2021 (SCI-Expanded)
- VI. **Effect of L-carnitine on the synthesis of nitric oxide in RAW 264•7 murine macrophage cell line**
Koc A., ÖZKAN T., Karabay A. Z., SUNGUROĞLU A., Aktan F.
CELL BIOCHEMISTRY AND FUNCTION, no.8, pp.679-685, 2011 (SCI-Expanded)
- VII. **Syntheses of novel indole lipoic acid derivatives and their antioxidant effects on lipid peroxidation**
Gurkan A. S., Karabay A. Z., Buyukbingöl Z., Adejare A., Buyukbingöl E.
ARCHIV DER PHARMAZIE, no.2-3, pp.67-73, 2005 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Synthesis and Anticancer Activity Studies of Novel 1,3,4-Thiadiazole Derivatives**
Kokaz S. F. K., Alp A. S., Karabay A. Z.

14th International Symposium on Pharmaceutical Sciences (ISOPS-14), Ankara, Turkey, 25 - 28 June 2024, pp.9

- II. **Nilotinib modulates inflammatory pathways in macrophages through its effects on COX-2 and MAPK Pathways**
KARABAY A. Z.
Uluslararası Katılımlı 6. İlaç Kimyası: İlaç Etkin Maddesi Tasarımı, Sentezi, Üretimi ve Standardizasyonu Kongresi, 22 - 25 March 2018
- III. **Synthesis and anticancer effects of some novel benzimidazole-derived PARP inhibitor molecules**
ALP M., ALP A. S., KARABAY A. Z., BÜYÜKBİNGÖL M. E.
2nd International Gazi Pharma Symposium Series, 11 - 13 October 2017
- IV. **Aspirin inhibits bcr-abl and its downstream effectors in chronic myeloid leukemia**
KARABAY A. Z., KOÇ A., HEKMATSHOAR Y., KARADAĞ A., ÖZKAN T.
VI. Molecular Medicine Congress, 22 - 25 May 2017, vol.2, pp.55
- V. **Retinoid analoglarının kronik miyeloid lösemi K562 hücrelerindeki apoptotik etkileri**
KOÇ A., KARABAY A. Z., ÖZKAN T., GURKAN-ALP A. S., AKTAN F., BÜYÜKBİNGÖL Z., BÜYÜKBİNGÖL M. E.
23. Ulusal Biyoloji Kongresi, Gaziantep, Turkey, 5 - 09 September 2016, pp.183
- VI. **Retinoid Analoglarının Kronik Miyeloid Lösemi K562 Hücrelerindeki Apoptotik Etkileri**
KOÇ A., KARABAY A. Z., ÖZKAN T., ALP A. S., AKTAN F., BÜYÜKBİNGÖL Z., BÜYÜKBİNGÖL M. E.
23. Ulusal Biyoloji Kongresi, Gaziantep, Turkey, 5 - 09 September 2016, pp.183
- VII. **Retinoid Analoglarının Kronik Miyeloid Lösemi K562 Hücrelerindeki Apoptotik Etkileri**
KOÇ A., KARABAY A. Z., ÖZKAN T., ALP A. S., AKTAN F., BÜYÜKBİNGÖL Z., BÜYÜKBİNGÖL M. E.
23. Ulusal Biyoloji Kongresi, Turkey, 5 - 09 September 2016
- VIII. **Intracavernous Injection Of Human Umbilical Cord Blood Mononuclear Cells Improves Erectile Dysfunction In Streptozotocin Induced Diabetic Rats**
CENGİZ T., YILMAZ D., KAYA E., KARABAY A. Z., GÜR S., ALTUN ENSARİ T., BAYATLI N., KARAHAN S. T., ÖZAKCA I., YILMAZ E.
American Diabetes Association's 76th Scientific Sessions, NEW ORLEANS, United States Of America, 10 - 14 June 2016
- IX. **Intracavernous Injection of Human Umbilical Cord Blood Mononuclear Cells Improves Erectile Dysfunction in Streptozotocin-induced Diabetic Rats**
GUR S., CENGİZ T., ORAL D. Y., KAYA E., KARABAY A. Z., ENSARİ T. A., BAYATLI N., KARAHAN S. T., ÖZAKCA GÜNDÜZ I., YILMAZ E.
76th Scientific Sessions of the American-Diabetes-Association, Louisiana, United States Of America, 10 - 14 June 2016, vol.65
- X. **Effects of indole alpha lipoic acid derivatives on cell viability parameters in K562 leukemia cell line**
Karabay A. Z., Koç A., Gurkan-Alp A. S., Büyükbingöl Z., Büyükbingöl M. E.
11th International Symposium on Pharmaceutical Sciences (ISOPS-11), Ankara, Turkey, 9 - 12 June 2015, pp.43
- XI. **Effect of microenvironment on imatinib resistance of K562 cells**
KARABAY A. Z., KOÇ A., AKTAN F., BÜYÜKBİNGÖL Z.
40th FEBS congress The Biochemical Basis of Life, Germany, 04 July 2015
- XII. **Effects of alpha lipoic acid derivatives on cell viability parameters in K562 leukemia cell line.**
KARABAY A. Z., KOÇ A., ALP A. S., BÜYÜKBİNGÖL Z., BÜYÜKBİNGÖL M. E.
11. International Symposium on Pharmaceutical Sciences (ISOPS), 9 - 12 June 2015
- XIII. **Synergetic effects of L-Carnitine and α -lipoic acid on viability of HCT 116 cell line.**
AKTAN F., KARABAY A. Z., KOÇ A.
WCIRDC, 20 - 22 November 2014
- XIV. **Effects of indole α -lipoic acid derivatives on nitric oxide production in LPS/IFN- γ activated RAW 264.7 macrophages.**
Karabay A. Z., Koç A., Gurkan A. S., Büyükbingöl Z., Büyükbingöl M. E.
FES/EMBO, Paris, France, 30 August - 04 September 2014, pp.281
- XV. **Effect of imatinib on nitrite levels in LPS/IFN γ activated RAW 264.7 macrophages.**
KOÇ A., KARABAY A. Z., ÖZKAN T., BÜYÜKBİNGÖL Z., SUNGURÖĞLU A., AKTAN F.

Lipidomics Impact on Cell Biology, Inflammation and Metabolic Diseases, La Jolla, CA, USA, 13 - 14 May 2014

- XVI. **Effect of imatinib on nitrite levels in LPS/IFN γ activated RAW 264.7 macrophages.**
KARABAY A. Z., KOÇ A., ÖZKAN T., BÜYÜKBİNGÖL Z., SUNGUROĞLU A., AKTAN F.
Lipid Maps Annual Meeting 2014: Lipidomics impact on Cell Biology, Inflammation and Metabolic Disease, 13 - 14 May 2014
- XVII. **Differences between akirin protein levels in imatinib resistant and sensitive K562 cell lines**
KOÇ A., KARABAY A. Z., ÖZKAN T., ALTINOK GÜNEŞ B., BÜYÜKBİNGÖL Z., SUNGUROĞLU A., AKTAN F.
Molecular Life Sciences International Symposium of the German Society for Biochemistry and Molecular Biology, 3 - 06 October 2013
- XVIII. **Examination of common gene targets for β -catenin and NF κ B proteins in imatinib sensitive and resistant K562 cell lines. Analysis of autophagy regulation: Discussion of recent research and new technologies meeting**
KARABAY A. Z., KOÇ A., ÖZKAN T., SUNGUROĞLU A., BÜYÜKBİNGÖL Z., AKTAN F.
Analysis of autophagy regulation: Discussion of recent research and new technologies meeting, 03 October 2013
- XIX. **Interaction of NF κ B and akirin proteins in imatinib resistant and sensitive K562 cell lines.**
KOÇ A., ÖZKAN T., KARABAY A. Z., SUNGUROĞLU A., BÜYÜKBİNGÖL Z., AKTAN F.
Analysis of autophagy regulation: Discussion of recent research and new technologies meeting, 03 October 2013
- XX. **Effect of Nilotinib on inflammatory markers in LPS/IFN γ activated RAW 264.7 macrophages.**
ÖZKAN T., KOÇ A., KARABAY A. Z., AKTAN F., SUNGUROĞLU A., BÜYÜKBİNGÖL Z.
Analysis of autophagy regulation: Discussion of recent research and new technologies meeting, 03 October 2013
- XXI. **Effects of methylsulfonylmethane on viability of HCT-116 cell line.**
KARABAY A. Z., ÖZKAN T., KOÇ A., SUNGUROĞLU A., BÜYÜKBİNGÖL Z.
22nd IUBMB& 37th FEBS Congress, 4 - 09 September 2012
- XXII. **Different expression pattern of akirin-2 in K562r and K562s cell lines.**
ÖZKAN T., KOÇ A., KARABAY A. Z., SUNGUROĞLU A., BÜYÜKBİNGÖL Z., AKTAN F.
EMBO Conference Series. Intracellular RNA localization and localized translation, 7 - 12 August 2011
- XXIII. **Effects of L-carnitine in SNP induced RAW 264.7 macrophages**
AKTAN F., KOÇ A., KARABAY A. Z.
Human Proteome World Congress Sydney 2010, 19 - 23 September 2010
- XXIV. **Carnosine does not inhibit nitric oxide production in LPS-activated RAW 264.7 macrophages.**
KARABAY A. Z., KOÇ A., ÖZKAN T., SUNGUROĞLU A., BÜYÜKBİNGÖL Z.
14th International Congress of Immunology, 01 August 2010, vol.22, pp.48-50
- XXV. **Effect of L-Carnitine on NF- κ B Activity in lipopolysaccharide stimulated RAW 264.7 macrophage cell line.**
KOÇ A., ÖZKAN T., KARABAY A. Z., SUNGUROĞLU A., AKTAN F.
35. FEBS Kongresi, 26 June - 01 July 2010
- XXVI. **Effect of wnt3a or lithium chloride preconditioning on nitric oxide production in RAW 264.7 macrophages and K562 leukemic cell line.**
KARABAY A. Z., ÖZKAN T., KOÇ A., KARADAĞ A., ALTINOK B., BÜYÜKBİNGÖL Z., SUNGUROĞLU A.
35th FEBS Congress Molecules of Life, 26 June - 01 July 2010
- XXVII. **NF- κ B activation and complex control of NOS2 gene promoter in K562 imatinib mesylate resistant CML cell line.**
ÖZKAN T., KARADAĞ A., ALTINOK B., KARABAY A. Z., KOÇ A., BOZKURT S., AYDOS O. S., SUNGUROĞLU A.
35th FEBS Congress Molecules of Life, Sweden, 26 June - 01 July 2010
- XXVIII. **Effects of some novel tetrahydronaphthalene derivatives on proliferation and nitric oxide production in lipopolysaccharide activated RAW 264.7 macrophages**
Gurkan A. S., Karabay A. Z., Büyükbingöl Z., Büyükbingöl M. E.
9th International Symposium on Pharmaceutical Sciences, Ankara, Turkey, 23 - 26 June 2009, pp.239
- XXIX. **Wheatgrass extract effects lipid peroxidation levels in human promyelocytic leukemia cell line HL-60**
ÖZKAN T., BAKAR F., KARABAY A. Z., KOÇ A., ALTINOK B., KARADAĞ A., AYDOS O. S., SUNGUROĞLU A.
. 34. FEBS Kongresi. Life's Molecular Interactions, 4 - 09 July 2009

- XXX. **Effect of methylsulfonylmethane on proliferation and nitric oxide production in LPS activated RAW 264.7 cells.**
KARABAY A. Z., KOÇ A., ÖZKAN T., SUNGUROĞLU A., AKTAN F., BÜYÜKBİNGÖL Z.
34th FEBS Congress Life's Molecular Interactions., 4 - 08 July 2009
- XXXI. **Effect of L-carnitine on NO production in lipopolysaccharide induced RAW 264.7 cells.**
KOÇ A., KARABAY A. Z., ÖZKAN T., KARADAĞ A., SUNGUROĞLU A., AKTAN F., BÜYÜKBİNGÖL Z.
III. International Congress of Molecular Medicine, 5 - 08 May 2009
- XXXII. **In vivo antioxidant effects of tryptophan in liver and kidney of experimental diabetic rat**
KARABAY A. Z., BÜYÜKBİNGÖL Z.
8th International Symposium of Pharmaceutical Sciences, 13 - 16 June 2006

Metrics

Publication: 86
Citation (WoS): 86
Citation (Scopus): 158
H-Index (WoS): 10
H-Index (Scopus): 10

Non Academic Experience

Witten Herdecke University