

Asst. Prof. SERAP PEKTAŞ

Personal Information

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International Researcher IDs

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Education Information

Doctorate, University of Massachusetts Amherst, College Of Natural Sciences, Chemistry/ Biological Chemistry, United States Of America 2008 - 2013

Undergraduate, Cumhuriyet Üniversitesi, Fen Edebiyat Fakültesi, Kimya, Turkey 2002 - 2006

Dissertations

Doctorate, O₂ Activation and Allosteric Zn(II) Binding on HIF-prolyl Hydroxylase-2 (PHD2), University of Massachusetts Amherst, College Of Natural Sciences, Chemistry/ Biological Chemistry, 2013

Research Areas

Life Sciences, Biochemistry, Enzymology, Molecular Biochemistry, Proteomics, Structural Biology, Chemistry, Biochemistry, Enzyme Kinetics, Protein Chemistry, Natural Sciences

Academic Titles / Tasks

Assistant Professor, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Kimya Bölümü, 2018 - Continues

Research Assistant PhD, Recep Tayyip Erdogan University, Fen Edebiyat Fakültesi, Kimya Bölümü, 2014 - 2018

Research Assistant, University of Massachusetts Amherst, 2008 - 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. Staphylococcus aureus Bacteriophage 52 Endolysin Exhibits Anti-Biofilm and Broad Antibacterial Activity Against Gram-Positive Bacteria**
Abdurahman M. A., DURUKAN İ., DİNÇER T., PEKTAŞ S., Karataş E., KILIÇ A. O.
Protein Journal, vol.42, no.5, pp.596-606, 2023 (SCI-Expanded)
- II. Increased Turnover at Limiting O₂ Concentrations by the Thr(387) -> Ala Variant of HIF-Prolyl Hydroxylase PHD2**
Pektas S., Taabazuing C. Y., Knapp M. J.
BIOCHEMISTRY, vol.54, no.18, pp.2851-2857, 2015 (SCI-Expanded)
- III. Substrate preference of the HIF-prolyl hydroxylase-2 (PHD2) and substrate-induced conformational change**

Pektas S., Knapp M. J.

JOURNAL OF INORGANIC BIOCHEMISTRY, vol.126, pp.55-60, 2013 (SCI-Expanded)

IV. **Inverse Solvent Isotope Effects Demonstrate Slow Aquo Release from Hypoxia Inducible Factor-Prolyl Hydroxylase (PHD2)**

Flagg S., Giri N., Pektas S., Maroney M., Knapp M.

BIOCHEMISTRY, vol.51, no.33, pp.6654-6666, 2012 (SCI-Expanded)

Articles Published in Other Journals

I. **ATM kinase phosphorylates Ser15 of p53 in a pH-dependent manner**

PEKTAŞ S.

Trakya University Journal of Natural Sciences, vol.25, no.2, pp.177-186, 2024 (ESCI)

II. **Cloning, Recombinant Production and Functional Analysis of Staphylococcal Phage Endolysins**

Pektaş S., Özgümüş O. B., Durukan İ., Uzun Ü., Karataş E., Kılıç A. O.

Farabi Tıp Dergisi, vol.2, no.2, pp.14-22, 2023 (Peer-Reviewed Journal)

Books & Book Chapters

I. **Application of Mass Spectrometry in Proteomics**

PEKTAŞ S.

in: Essential Techniques for Medical and Life Scientists: A Guide to Contemporary Methods and Current Applications with the Protocols, Yusuf Tutar, Editor, Bentham Science Publishers, Sharjah, pp.1-29, 2018

Refereed Congress / Symposium Publications in Proceedings

I. **Peptides with the "xxFWxFWxxLxx" motif may interact with MDM2 more efficiently than peptides with the "xxFxxxWxxLxx" motif**

PEKTAŞ S.

5th International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 23 November 2022

II. **Effect of TAD mutations on phosphorylation of p53 by DNA-PK**

Ateş M., Sinim M., Uzun Ü., Kılıç A. O., Özgümüş O. B., Pektaş S.

5th International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 23 November 2022

III. **Identification and Characterization of HIV-1-Reverse Transcriptase Inhibitors from Propolis Extracts**

YILDIZ O., BELDÜZ A. O., GÜLER H. İ., KOLAYLI S., PEKTAŞ S.

47th APIMONDIA, International Apicultural Congress August 24 - 28, 2022, Istanbul, TÜRKİYE, İstanbul, Turkey, 24 August 2022, pp.81

IV. **Designing BRCA1 serine phosphorylation site inspired peptides to inhibit MDM2-p53 interaction**

PEKTAŞ S.

the 13th International Conference on Protein Stabilization, Bulgaria, 07 October 2021, pp.34

V. **Spike Protein RBD Mutations and Their Interactions with Receptor ACE2**

PEKTAŞ S.

III. INTERNATIONAL COVID-19 AND CURRENT ISSUES CONGRESS, Turkey, 19 June 2021

VI. **Antibacterial properties of three newly identified recombinant Staphylococcus aureus phage endolysins**

KILIÇ A. O., ABDURRAHMAN M., PEKTAŞ S., TOSUN İ.

Proceedings of 6th Applied Microbiology, Roma, Italy, 21 - 22 October 2019

VII. **Transient transfection and expression of ATM**

Pektaş S.

7th International Congress of the Molecular Biology Association of Turkey, İstanbul, Turkey, 27 - 29 September 2019, pp.184

VIII. **The effect of pH on p53 phosphorylation by ATM kinase**

PEKTAŞ S.

International Conference on Protein Chemistry and Chemical Biology ICPCCB, 17 - 18 September 2019

IX. **The Investigation of the Usability of Propolis Extracts in Aids Treatment**

YILDIZ O., BELDÜZ A. O., GÜLER H. İ., PEKTAŞ S., KOLAYLI S.

6.ULUSLARARASI MUĞLA ARICILIK VE ÇAM BALI KONGRESİ, Muğla, Turkey, 15 - 19 October 2018, pp.205-206

X. **Role of the Hydrogen Bonding Interactions in the O₂ Sensitivity of HIF Prolyl Hydroxylase PHD2**

PEKTAŞ S., Knapp m.

The 29th Annual Symposium of the Protein Society, Barcelona, Spain, 22 - 25 July 2015, vol.24, pp.1-313

XI. **Hydrogen bonding from the second coordination sphere controls o₂ activation in HIF-Prolyl hydroxylase (PHD2)**

PEKTAŞ S.

Challenges in chemical biology (ISACS11), 23 - 26 July 2013

XII. **Allosteric metal binding to the HIF-Prolyl hydroxylase-2 (Phd2)**

PEKTAŞ S.

The 27th annual symposium of the protein society, 20 - 23 July 2013

Supported Projects

PEKTAŞ S., TUBITAK Project, ATM Kinaz Enziminin Aktivite Tespiti için MALDI-MS'e Dayalı Yöntem Geliştirilmesi, 2019 - Continues

PEKTAŞ S., TUBITAK Project, Propolis Ekstraktlarından HIV-1-Revers Transkriptaz İnhibitörlerinin Tanımlanması ve Karakterizasyonu, 2017 - Continues

PEKTAŞ S., TUBITAK Project, ATM enziminde potansiyel ilaç hedefi allosterik bölgelerin moleküler düzeyde belirlenmesi, 2016 - Continues

PEKTAŞ S., Project Supported by Higher Education Institutions, ATM kinaz enziminin aktivitesi üzerine pH etkisinin incelenmesi, 2017 - 2020

Metrics

Publication: 19

Citation (WoS): 34

Citation (Scopus): 36

H-Index (WoS): 3

H-Index (Scopus): 3