

Prof. SEMRA KOCABIYIK

Personal Information

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International Researcher IDs

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ScopusID: 7003276398

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Education Information

Doctorate, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, Turkey 1982 - 1986

Postgraduate, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, Turkey 1980 - 1982

Undergraduate, Ankara University, Faculty Of Agriculture, Department Of Plant Protection, Turkey 1972 - 1977

Dissertations

Doctorate, A comparative study on the resistance to aminoglycoside antibiotics among strains of Enterobacteriaceae, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 1975

Research Areas

Natural Sciences

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 1995 - Continues

Associate Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 1989 - 1995

Assistant Professor, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 1988 - 1989

Lecturer PhD, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 1987 - 1987

Research Assistant, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 1980 - 1986

Academic and Administrative Experience

Seçilmiş Fakülte Yönetim Kurulu Üyesi, Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 2013 - 2015

Head of Department, Middle East Technical University, Graduate School of Natural and Applied Sciences, Biomedical Engineering, 2010 - 2012

Middle East Technical University, Faculty of Arts and Sciences, Department of Biology, 2003 - 2006

Advising Theses

- Kocabiyik S., Gürakan C., Improvement of holdase activity of a small heat shock protein from extremely acidophilic Archaea, Postgraduate, Y.Kaçer(Student), 2019
- KOCABIYIK S., Transcriptome analysis of thermoplasma volcanium GSS1 under extreme stress, Postgraduate, S.Zabcı(Student), 2015
- KOCABIYIK S., Transcriptome analysis of Thermoplasma volcanium GSS11 under extreme stress, Postgraduate, S.ZABCI(Student), 2015
- KOCABIYIK S., Structural modelling and functional analysis of the engineered small heat-shock protein,TPV-HSP14.3 from Thermoplasma volcanium, Postgraduate, I.SHERAJ(Student), 2014
- KOCABIYIK S., Expression profiling of Thermoplasma volcanium GSS1 under stress conditions with specific emphasis on proteasome associated regulatory VAT genes, Postgraduate, T.YILMAZ(Student), 2013
- KOCABIYIK S., The role of small heat shock proteins of the thermoacidophilic archaeon thermoplasma volcanium in the stress response, Postgraduate, S.Aygar(Student), 2011
- VOLKAN M., KOCABIYIK S., Application of surface-enhanced raman scattering (SERS) method for genetic analyses, Doctorate, S.KARABIÇAK(Student), 2011
- KOCABIYIK S., The role of small heat shock proteins of the thermoacidophilic archaeon, Thermoplasma volcanium in the stress response, Postgraduate, S.AYGAR(Student), 2011
- KOCABIYIK S., Heat shock response in Thermoplasma volcanium: Cloning and differential expression of molecular chaperonin (thermosome) genes, Postgraduate, F.DOLDUR(Student), 2008
- ÇALIK P., KOCABIYIK S., Recombinant therapeutic protease production by Bacillus sp., Postgraduate, N.KORKMAZ(Student), 2007
- KOCABIYIK S., Determination of genes involved in the yellow rust disease of wheat, Doctorate, O.Bozkurt(Student), 2007
- KOCABIYIK S., AKKAYA M., Determination of genes involved in yellow rust disease of wheat, Doctorate, O.BOZKURT(Student), 2007
- KOCABIYIK S., AKKAYA M., Biochemical characterization of recombinant 20S proteasome from Thermoplasma volcanium and cloning of its regulatory subunit gene, Postgraduate, G.BAYDAR(Student), 2006
- KOCABIYIK S., Cloning and expression of periplasmic (clp p-like) and membrane-bound serine protease genes of thermoplasma volcanium in escherichia coli, Postgraduate, B.Demirok(Student), 2006
- KOCABIYIK S., Cloning and expression of periplasmic (CLpP-LIKE) and membrane-bound serine protease genes of thermoplasma volcanium in escherichia coli, Postgraduate, B.DEMİROK(Student), 2006
- KOCABIYIK S., Expression of recombinant acid protease (thermopsin) gene from thermoplasma volcanium, Postgraduate, B.KOYUNCU(Student), 2006
- KOCABIYIK S., Biochemical characterization of recombinant 20s proteasome from thermoplasma volcanium and cloning of it's regulatory subunit gene, Postgraduate, G.Baydar(Student), 2006
- KOCABIYIK S., Inference of switching networks by using a piecewise linear formulation, Postgraduate, D.AKÇAY(Student), 2005
- KOCABIYIK S., AKKAYA M., Cloning, expression and sequencing of citrate synthase from Thermoplasma volcanium, Postgraduate, Ç.ÇEKİÇ(Student), 2004
- KOCABIYIK S., Construction of various fusion proteins of recombinant citrate synthase from thermoplasma volcanium, Postgraduate, S.ÖZDOĞAN(Student), 2004
- KOCABIYIK S., Cloning of an extracellular thermostable acid protease from thermoplasma volcanium e.coli, Postgraduate, H.Özel(Student), 2003
- KOCABIYIK S., AKKAYA M., Identification of the genes involved in "Phyotsiderophore" synthesis and metal ion uptake in wheat using RT-PCR, Postgraduate, Y.AKTAŞ(Student), 2003
- KOCABIYIK S., AKKAYA M., Investigations of wheat genes involved in zinc efficiency mechanism using differential display technique, Postgraduate, M.TÜRKAŞ(Student), 2003
- KOCABIYIK S., Purification and characterization of cytoplasmic and proteasome associated chymotrypsin-like proteases

from *Thermoplasma volcanium*, Doctorate, İ.ÖZDEMİR(Student), 2003

KOCABIYIK S., AKKAYA M., Cloning of alpha and beta subunit genes of 20 S proteasome from *thermoplasma volcanium*, Postgraduate, G.SEYİT(Student), 2002

KOCABIYIK S., Isolation of monobromoacetate and dichloroacetate degrading bacteria from polluted seawater and analysis of haloacid dehalogenase genotypes by using polymerase chain reaction (PCR), Postgraduate, B.FIRAT(Student), 2000

KOCABIYIK S., Engineering of citrate synthase from *thermoplasma acidophilum* to investigate the molecular mechanisms of thermostability, Doctorate, İ.ERDURAN(Student), 2000

KOCABIYIK S., Engineering of citrate synthase from *Thermoplasma acidophilum* to investigate the molecular mechanisms of Thermostability, Doctorate, İ.Erduran(Student), 2000

KOCABIYIK S., Isolation of monobromoacetate and dichloroacetate degrading bacteria from polluted seawater and analysis of haloacid dehalogenase genotypes by using polymerase chain reaction (PCR), Postgraduate, B.Firat(Student), 2000

KOCABIYIK S., Protease activities of thermophilic microorganisms isolated from hot springs in Turkey: detection of alkaline serine protease gene sequences by polymerase chain reaction(PCR), Postgraduate, B.Erdem(Student), 1999

KOCABIYIK S., Protease activities of thermophilic microorganisms isolated from hot springs in Turkey: Detection of alkaline serine protease gene sequences by polymerase chain reaction (PCR), Postgraduate, B.ERDEM(Student), 1999

Kocabiyyk S., Arınç E., Field Evaluation of Cytochrome P450C1A1 mRNA Levels as a Monitor for Pollution, Postgraduate, E.Su(Student), 1998

KOCABIYIK S., AKKAYA M., Cloning and sequencing of a PCR amplicon of a novel dehalogenase gene from *pseudomonas* Sp.Strain SEC896, Postgraduate, G.Mehmet(Student), 1997

KOCABIYIK S., Cloning and sequencing of a PCR amplicon of a novel dehalogenase gene from *pseudomonas* sp strain SEC 896, Postgraduate, G.MEHMET(Student), 1997

KOCABIYIK S., Detection of monochloroacetate degrading genotypes of *pseudomonas* SP.Using PCR/DNA probe assays, Postgraduate, E.CABA(Student), 1996

KOCABIYIK S., The Effects of cysteine 43 mutation on catalytic properties and thermostability of *thermoplasma acidophilum* citrate synthase, Postgraduate, İ.ERDURAN(Student), 1996

KOCABIYIK S., Cloning and expression of a haloacid dehalogenase gene from *pseudomonas* sp. strain ISS in *E. coli*, Postgraduate, B.ASLAN(Student), 1995

KOCABIYIK S., Detection of aminoglycoside 3'-phosphotransferases by using Dna and antibody probes, Postgraduate, A.KOÇER(Student), 1995

KOCABIYIK S., Cloning and expression of a haloacid dehalogenase gene from *pseudomonas* SP. strain 19S in *e coli*, Postgraduate, B.Aslan(Student), 1995

KOCABIYIK S., Detection of aminoglycoside 3'- phosphotransferases by using DNA and antibody probes, Postgraduate, A.Sağiroğlu(Student), 1995

KOCABIYIK S., Molecular analysis of a unique type of S(alfa)-thalassemia, Doctorate, G.BALTA(Student), 1994

KOCABIYIK S., Molecular analysis of a unique type of thalassemia, Doctorate, G.Balta(Student), 1994

KOCABIYIK S., *Pseudomonas aeruginosa* ses-938-1 elastase : Isolation microbiological and biochemical characterizations, Postgraduate, M.ERGİN(Student), 1994

KOCABIYIK S., *Pseudomonas aeruginosa* ses-938-1 elastase: isolation microbiological and biochemical characterizations, Postgraduate, M.Ezgi(Student), 1994

Jury Memberships

Associate Professor Exam, Associate Professor Exam, Middle East Technical University, March, 2020

Associate Professor Exam, Associate Professor Exam, Middle East Technical University, March, 2020

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Structural and Functional Impacts of Extended N-Terminal End of the Small Heat Shock Protein Tpv HSP 14.3**
Zabci S., KOCABIYIK S.
Applied Biochemistry and Microbiology, vol.60, no.2, pp.287-293, 2024 (SCI-Expanded)
- II. **Effect of N-terminal extension of small heat shock protein, Tpv HSP 14.3 on its molecular chaperone activity**
Zabci S., Kocabiyik S.
NEW BIOTECHNOLOGY, vol.33, 2016 (SCI-Expanded)
- III. **Alpha crystallin domain mutations increase holdase capacity of the archeal small heat shock protein, Tpv HSP 14.3**
Kocabiyik S., Zabci S.
NEW BIOTECHNOLOGY, vol.33, 2016 (SCI-Expanded)
- IV. **Preparation of silica coated cobalt ferrite magnetic nanoparticles for the purification of histidine-tagged proteins**
Aygur G., Kaya M., Özkan N., Kocabiyik S., Volkan M.
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.87, pp.64-71, 2015 (SCI-Expanded)
- V. **Effects of K87 mutations in the alpha-crystallin domain of Tpv sHSP 14.3 on oligomerization and in vitro chaperone activity**
Kocabiyik S., Sharej I.
NEW BIOTECHNOLOGY, vol.31, 2014 (SCI-Expanded)
- VI. **Gene expression profiling of Thermoplasma volcanium under extreme stress conditions**
Zabci S., Kocabiyik S.
NEW BIOTECHNOLOGY, vol.31, 2014 (SCI-Expanded)
- VII. **Improvement of protein stability and enzyme recovery under stress conditions by using a small HSP (tpv-HSP 14.3) from Thermoplasma volcanium**
Kocabiyik S., Aygur S.
PROCESS BIOCHEMISTRY, vol.47, pp.1676-1683, 2012 (SCI-Expanded)
- VIII. **Molecular cloning and co-expression of Thermoplasma volcanium proteasome subunit genes**
Kocabiyik S., Ozdemir I., Zwickl P., Ozdogan S.
PROTEIN EXPRESSION AND PURIFICATION, vol.73, pp.223-230, 2010 (SCI-Expanded)
- IX. **Essential Structural and Functional Features of Small Heat Shock Proteins in Molecular Chaperoning Process**
Kocabiyik S.
PROTEIN AND PEPTIDE LETTERS, vol.16, pp.613-622, 2009 (SCI-Expanded)
- X. **An extracellular - Pepstatin insensitive acid protease produced by Thermoplasma volcanium**
Kocabiyik S., Ozel H.
BIORESOURTE TECHNOLOGY, vol.98, pp.112-117, 2007 (SCI-Expanded)
- XI. **Purification and characterization of an intracellular chymotrypsin-like serine protease from Thermoplasma volcanium**
Kocabiyik S., Ozdemir I.
BIOSCIENCE BIOTECHNOLOGY AND BIOCHEMISTRY, vol.70, pp.126-134, 2006 (SCI-Expanded)
- XII. **Intracellular alkaline proteases produced by thermoacidophiles: detection of protease heterogeneity by gelatin zymography and polymerase chain reaction (PCR)**
Kocabiyik S., Erdem B.
BIORESOURTE TECHNOLOGY, vol.84, pp.29-33, 2002 (SCI-Expanded)
- XIII. **Induced CYP1A mRNA, protein and catalytic activity in the liver of feral fish, leaping mullet, Liza saliens**
Arinc E., Kocabiyik S., Su E.
COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY C-TOXICOLOGY & PHARMACOLOGY, vol.128, no.2, pp.281-290, 2001 (SCI-Expanded)
- XIV. **The effect of valine substitution for glycine in the dimer interface of citrate synthase from**

Thermoplasma acidophilum on stability and activity

Kocabiyik S., Erduran I.

BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.275, pp.460-465, 2000 (SCI-Expanded)

- XV. **Amino acid substitutions in the subunit interface enhancing thermostability of Thermoplasma acidophilum citrate synthase**
Erduran I., Kocabiyik S.
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.249, pp.566-571, 1998 (SCI-Expanded)
- XVI. **The effect of hydrophobic interactions in the dimer interface of Thermoplasma acidophilum citrate synthase on thermostability.**
Erduran I., Kocabiyik S.
JOURNAL OF PROTEIN CHEMISTRY, vol.17, pp.531-532, 1998 (SCI-Expanded)
- XVII. **Prevalence of monochloroacetate degrading genotypes among soil isolates of Pseudomonas sp.**
Kocabiyik S., Caba E.
BIODEGRADATION, vol.8, pp.371-377, 1997 (SCI-Expanded)
- XVIII. **The effect of cysteine-43 mutation on thermostability and kinetic properties of citrate synthase from Thermoplasma acidophilum**
Kocabiyik S., Erduran I., Russel R., Danson M., Hough D.
BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, vol.224, no.1, pp.224-228, 1996 (SCI-Expanded)
- XIX. **ANALYSIS OF PLASMIDS MEDIATING ANT (2'') AND AAC(3)-II BASED GENTAMICIN RESISTANCE IN CLINICAL ISOLATES OF ENTEROBACTERIACEAE**
KOCABIYIK S., ALAEDDINOGLU N.
ZENTRALBLATT FUR BAKTERIOLOGIE-INTERNATIONAL JOURNAL OF MEDICAL MICROBIOLOGY VIROLOGY PARASITOLOGY AND INFECTIOUS DISEASES, vol.271, no.2, pp.214-221, 1989 (SCI-Expanded)
- XX. **A THERMO-STABLE DEHALOGENASE IN THE EXTRACTS FROM PSEUDOMONAS SP (STRAIN-19S)**
Kocabiyik S., Turkoglu S.
BIOTECHNOLOGY LETTERS, vol.11, pp.397-400, 1989 (SCI-Expanded)

Articles Published in Other Journals

- I. **Biomonitoring of toxic carcinogenic llutants by molecular and biochemical responses of fish cytochrome P4501A1 CYP1A1 along the Izmir Bay on the Mediterranean Sea**
KOCABIYIK S.
Rapp. Comn. Int. Mer. Médit, vol.36, pp.179-180, 2001 (Peer-Reviewed Journal)
- II. **Effects of Metals on Elastase from Pseudomonas aeruginosa SES-938-1**
Kocabiyik S., Türkoğlu S., Ergin E.
Biological Trace Element Research, vol.50, no.1, pp.25-31, 1995 (Scopus)
- III. **Cloning and Expression of a Haloacid Dehalogenase form Pseudomonas sp. Strain 19S,**
Kocabiyik S., Aslan B., Muller R.
Biodegradation, vol.6, no.3, pp.217-222, 1995 (Scopus)
- IV. **A Modified Method for RNA Isolation from Bacteria by Guanidinium Thiocyanate - Cesium Chloride Centrifugation,"**
Kocabiyik S.
BioTechniques, vol.18, no.4, pp.570-572, 1995 (Scopus)
- V. **Amino Acid Substitutions within the Analogous Nucleotide Binding Loop (P-Loop) of Aminoglycoside 3' -Phosphotransferase-II**
Kocabiyik S., Perlin M.
International Journal of Biochemistry, vol.26, no.1, pp.61-66, 1994 (Peer-Reviewed Journal)
- VI. **Site - Specific Mutations of Conserved C - Terminal Residues in Aminoglycoside 3'-Phosphotransferase II [APH(3')-II]: Phenotypic and Structural Analysis of the Mutant Enzymes**
Kocabiyik S., Perlin M.

- Biochem. Biophys. Res. Commun, vol.185, no.3, pp.925-931, 1992 (Peer-Reviewed Journal)
- VII. **Evaluation of Plasmid DNA and Protein Profiles as Epidemiological Tools in *Pseudomonas aeruginosa***
Kocabiyik S., Adwan K., Alaeddinoğlu G.
Chemotherapy Int. J. Experiment. Clin. Chemother , vol.5, no.1, pp.37-40, 1992 (Peer-Reviewed Journal)
- VIII. **Altered Substrate Specificities by Substitutions at Tyr 218 in Bacterial Aminoglycoside 3'-Phosphotransferase - II**
Kocabiyik S., Perlin M.
FEMS Microbiol. Lett, vol.93, pp.199-202, 1992 (Peer-Reviewed Journal)
- IX. **, " Structure - Function Analyses for Aminoglycoside 3'-Phosphotransferase-II [APH(3')-II]**
Kocabiyik S., Mullis C., Breeding C., Perlin M.
SAAS Bulletin: Biochem. Biotech, vol.5, pp.158-163, 1992 (Peer-Reviewed Journal)
- X. **Aminoglycoside Resistance Profiles of the Gentamicin Resistant Enterobacteriaceae and *Pseudomonas* Strains**
Kocabiyik S., Akalın E., Alaeddinoğlu G.
Int. J. Experiment. Clin. Chemother, vol.2, no.2, pp.118-124, 1989 (Peer-Reviewed Journal)
- XI. **Plasmid Profiles of Gentamicin Resistant Gram Negative Bacilli**
KOCABIYIK S.
HACETTEPE MEDICAL JOURNAL, vol.22, no.2, pp.79-86, 1989 (Peer-Reviewed Journal)
- XII. **Biodegradation of Halogenated Hydrocarbons**
KOCABIYIK S.
JOURNAL OF KÜKEM, vol.12, no.1, pp.15-28, 1989 (Peer-Reviewed Journal)
- XIII. **Resistance to Aminoglycoside Antibiotics**
KOCABIYIK S.
JOURNAL OF ANKEM, vol.2, no.3, pp.203-206, 1988 (Peer-Reviewed Journal)
- XIV. **Determination of Aminoglycoside Modification Enzymes by MIC Ratio Method and its Comparison with Radioactive Assay**
KOCABIYIK S.
Hacettepe Medical Journal, vol.21, no.3, pp.145-156, 1988 (Peer-Reviewed Journal)
- XV. **Epidemiological and Practical Aspects of Enzyme Mediated Aminoglycoside Resistance**
KOCABIYIK S.
Hacettepe Medical Journal, vol.20, no.0, pp.185-189, 1987 (Peer-Reviewed Journal)

Books & Book Chapters

- I. **Moleküler Genetik Teknikleri**
KOCABIYIK S.
in: Moleküler Hücre Biyolojisi, Hikmet Geçkil, Murat Özmen, Özfer Yeşilada, Editor, Palme yayıncılık, pp.177-198, 2013

Refereed Congress / Symposium Publications in Proceedings

- I. **Gene expression analysis of thermoacidophilic archaeon *Thermoplasma volcanium* GSS1 under mild- and severe-pH stress conditions**
KOCABIYIK S., ZABCI S., YILMAZ T.
BioMicroWorld2017 VII International Conference on Environmental, Industrial and Applied Microbiology, Madrid, Spain, 18 - 20 October 2017
- II. **Temperature dependent variations in oligomer status of an archaeal small heat shock protein, Tpv HSP14.3**

RAFIQ A., ZABCI S., KAÇER Y., KOCABIYIK S.

BioMicroWorld2017 VII International conference on Environmental Industrial and Applied Microbiology, 18 - 20 October 2017

- III. **Yüzeyde Güçlendirilmiş Raman Saçılması (YGRS) Metodu ile Proteazom DNA'sının Tanınması**
UZUN C., KARABIÇAK S., KOCABIYIK S., VOLKAN M.
29. Ulusal Kimya Kongresi, Turkey, 10 - 14 September 2017
- IV. **Alpha crystallin domain mutations increase holdase capacity of the archeal small heat shock protein, Tpv HSP 14.3**
KOCABIYIK S.
17th European Biotechnology Congress, Krakow, Poland, 3 - 06 July 2016, vol.33
- V. **Gene expression profile of Thermoplasma volcanium GSS1 under mild and severe oxidative stress**
Zabci S., ÇELEBİ M. N., KOCABIYIK S.
40th Congress of the Federation-of-European-Biochemical-Societies (FEBS) - The Biochemical Basis of Life, Berlin, Germany, 4 - 09 July 2015, vol.282, pp.75
- VI. **Importance of salt bridges in the dimer interface of Tpv sHSP14.3 for oligomere assembly and chaperone function**
KOCABIYIK S., Sheraj I., Zabci S., ÇELEBİ M. N.
40th Congress of the Federation-of-European-Biochemical-Societies (FEBS) - The Biochemical Basis of Life, Berlin, Germany, 4 - 09 July 2015, vol.282, pp.332
- VII. **Gene expression profiling of Thermoplasma volcanium under extreme stress conditions**
KOCABIYIK S.
European Biotechnology Congress, Edinburgh, Saint Helena, 22 - 26 June 2014
- VIII. **Heat-induced structural dynamics of a thermoacidophilic small heat-shock protein sHSP14.3; functional implications**
KOCABIYIK S., Sheraj I.
38th Congress of the Federation-of-European-Biochemical-Societies (FEBS), Saint Peter, Guernsey And Alderney, 6 - 11 July 2013, vol.280, pp.139
- IX. **Altered gene expression patterns of Thermoplasma volcanium 20S proteasome-VAT complex proteins in stress response**
Yilmaz T., Kacar S., KOCABIYIK S.
22nd IUBMB Congress/37th FEBS Congress, Sevilla, Spain, 4 - 09 September 2012, vol.279, pp.499-500
- X. **Determination of proteasome activity using surface enhanced raman scattering (SERS) spectroscopy**
VOLKAN M., KOCABIYIK S., Akpınar Y., UZUN C. N.
22nd IUBMB Congress/37th FEBS Congress, Sevilla, Spain, 4 - 09 September 2012, vol.279, pp.351
- XI. **Application of SERS nanotag labeled probes for DNA studies**
UZUN C. N., KOCABIYIK S., VOLKAN M.
22nd IUBMB Congress/37th FEBS Congress, Sevilla, Spain, 4 - 09 September 2012, vol.279, pp.350-351
- XII. **Genome-wide transcriptional response of the thermoacidophilic archaeon, Thermoplasma volcanium to environmental stress**
KOCABIYIK S., Yilmaz T.
22nd IUBMB Congress/37th FEBS Congress, Sevilla, Spain, 4 - 09 September 2012, vol.279, pp.501
- XIII. **Stress induced changes in the oligomeric assembly and expression of a small heat shock protein from thermoacidophilic archaeon Thermoplasma volcanium**
KOCABIYIK S.
4th Congress of European Microbiologists, FEMS 2011, Cenevre, Switzerland, 1 - 04 June 2011, pp.249
- XIV. **Improving Protein Stability And Enzyme Recovery Under Stress Conditions By Use Of Recombinant Molecular Chaperones**
KOCABIYIK S., Aygar S., Koyuncu B.
14th International Biotechnology Symposium and Exhibition (IBS-2008), Rimini, Italy, 14 - 18 September 2010, vol.150
- XV. **Cloning and Expression of Hsp20 Related Small Heat Shock Proteins of Thermoplasma volcanium**

- KOCABIYIK S.
of 32nd FEBS Congress Molecular Machines, Vienna, Austria, 7 - 12 July 2007, pp.195
- XVI. **Differential expression of archaeal Hsp60 and CDC48 homologue VAT genes in heat shock**
KOCABIYIK S., Doldur F., Demirok B.
32nd Congress of the Federation-of-European-Biochemical-Societies (FEBS), Vienna, Austria, 7 - 12 July 2007, vol.274, pp.196
- XVII. **Differential expression of archaeal Hsp60 and CDC48 homologue VAT genes in heat-shock**
Doldur F., KOCABIYIK S., Demirok B.
32nd Congress of the Federation-of-European-Biochemical-Societies (FEBS), Vienna, Austria, 7 - 12 July 2007, vol.274, pp.195
- XVIII. **Cloning and expression of Hsp20 related small heat shock proteins of Thermoplasma**
Koyuncu B., KOCABIYIK S.
32nd Congress of the Federation-of-European-Biochemical-Societies (FEBS), Vienna, Austria, 7 - 12 July 2007, vol.274, pp.195
- XIX. **Purification and characterization of archaeal 6xHis tagged recombinant proteases**
Koyuncu B., Demirok B., Kocabiyik S.
31st Congress of the Federation-of-European-Biochemical-Societies (FEBS), İstanbul, Turkey, 24 - 29 June 2006, vol.273, pp.361
- XX. **Biochemical characterization of Thermoplasma volcanium recombinant 20S proteasome and its regulatory subunit**
Baydar G., Kocabiyik S.
IUBMB 50th Anniversary Symposium, Budapest, Hungary, 2 - 07 July 2005, vol.272, pp.179
- XXI. **Cloning and expression of a pepstatin insensitive acid protease from Thermoplasma volcanium in E-coli**
Koyuncu B., Ozel H., Kocabiyik S.
30th Congress of the Federation-of-European-Biochemical-Societies (FEBS)/9th IUBMB Conference, Budapest, Hungary, 2 - 07 July 2005, vol.272, pp.156
- XXII. **Citrate synthases from organisms with diverse optimum growth temperatures**
KOCABIYIK S., ÇEKİÇ Ç.
BAGECO 8, Lyon, France, 26 - 29 June 2005, pp.16
- XXIII. **Energy dependent proteases in heat shock response of thermoacidophilic archaeon Thermoplasma volcanium**
KOCABIYIK S.
BAGECO 8, Lyon, France, 26 - 29 June 2005, pp.86
- XXIV. **Programmed proteolytic machineries of Thermoplasma volcanium**
KOCABIYIK S.
20th IUBMB International Congress of Biochemistry and Molecular Biology and 11th FAOBMB Congress, Kyoto, Japan, 18 - 23 June 2006, pp.94
- XXV. **Cloning and expression of a pepstatin insensitive acid protease from T volcanium in E coli**
KOCABIYIK S.
30th FEBS Congress and 9th IUBMB Conference, The protein world Budapest, Budapest, Hungary, 2 - 07 June 2005, pp.156
- XXVI. **Cloning of Citrate Synthase Gene from Thermoplasma volcanium**
KOCABIYIK S., ÇEKİÇ Ç.
28th Meeting of the Federation of European Biochemical Societies, İstanbul, Turkey, 20 - 25 October 2002, pp.114
- XXVII. **Cloning of Two Subunit Genes of Thermoplasma volcanium**
KOCABIYIK S.
28th Meeting of the Federation of European Biochemical Societies, İstanbul, Turkey, 20 - 25 October 2002, pp.114
- XXVIII. **Effects of Polyols on Thermal Stability of Citrate Synthase from Thermoplasma acidophilum**
KOCABIYIK S.
28th Meeting of the Federation of European Biochemical Societies, İstanbul, Turkey, 20 - 25 October 2002, vol.269,

pp.113

- XXIX. **A Thermophilic Extracellular Acid Protease from *Thermoplasma volcanium***
KOCABIYIK S.
28th Meeting of the Federation of European Biochemical Societies, İstanbul, Turkey, 20 - 25 October 2002, vol.269, pp.113
- XXX. **Purification and Characterization of a Thermostable Serine protease from *Thermoplasma volcanium***
KOCABIYIK S.
27th Meeting of the Federation of European Biochemical Societies, Lisbon, Portugal, 30 June - 05 July 2001, pp.193
- XXXI. **20S Proteasome Complex from *Thermoplasma volcanium***
KOCABIYIK S.
27th Meeting of the Federation of European Biochemical Societies, Lisbon, Portugal, 30 June - 05 July 2001, pp.199
- XXXII. **Differential Amplification of 16S rDNA Sequences of Archaea and bacteria from Solfataric Hot Springs in Turkey**
KOCABIYIK S.
18th International Union of Biochemistry and Molecular Biology (IUBMB) Congress, Birmingham, United Kingdom, 16 - 20 July 2000, pp.550
- XXXIII. **The effects of external factors on the Activities of Mutant *Thermoplasma Citrate Synthases***
KOCABIYIK S.
18th International Union of Biochemistry and Molecular Biology (IUBMB) Congress, Birmingham, United Kingdom, 16 - 20 July 2000, pp.1077
- XXXIV. **Effects of Glycine Substitutions in Subunit Interface Helices on Stability of *Thermoplasma acidophilum Citrate Synthase***
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