Abstract Title: AAA+ ATPase ATAD2 signaling networks in gastric cancer

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Abstract (not more than 300 words)

Gastric cancer is a difficult-to-treat disease due to the lack of detection markers and limitations in our knowledge that can explain the highly aggressive nature of gastric cancer cells. As cellular metabolism plays crucial roles in cancer progression and is frequently altered, studying the role of ATPases in cancer cells would open up a new horizon of gastric cancer treatment. The AAA+ ATPase ATAD2 remains overexpressed in several cancers including gastric cancer. However, nothing is known about how exactly gastric cancer progression is benefitted from the overexpression of ATAD2. Here we elucidate the upstream events of ATAD2 expression in gastric carcinogenesis.

Keywords— ATAD2, Gastric cancer, Hypoxia, Helicobacter pylori.

Professional Biography (100-150 words)

Dr. Anasuya Roychowdhury, is an Assistant Professor of Chemistry and Biosciences (School of Basic Sciences) at Indian Institute of Technology (IIT) Bhubaneswar, India. She got both M.Sc. and M.Tech. degrees in Biotechnology from Visva-Bharati Santiniketan, and Jadavpur University, India respectively. Dr. Roychowdhury then moved to USA to do her Ph.D. (Molecular Biophysics) at Prof. Wlodek Bujalowski's Lab in The University of Texas Medical Branch (UTMB) at Galveston, Texas, USA and postdoctoral research at Prof. Daniel Finley's Lab in Harvard Medical School, USA. After that she came back to India to join IIT Bhubaneswar. Dr. Roychowdhury is the recipients of The Protein Society Finn Wold Travel Award, Irma Mendoza Scholarship Award, Biochemistry and Molecular Biology Travel Award and The Robert A. Welch Award for Excellence in Graduate Research in Chemistry. Her current research focuses on "ATPases in physiology, medicine and diseases".



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