

METHODS IN MOLECULAR BIOLOGY

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ADP-ribosylation and NAD+ Utilizing Enzymes

Methods and Protocols

Edited by

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Preface

This volume is focused on mono-ADP-ribosylation and enzymes that utilize NAD⁺ including the sirtuins, poly(ADP-ribosyl)transferases (PARPs), and bacterial and eukaryotic ADP-ribosyltransferases. Together these enzymes play important roles in aging, bacterial pathogenicity, and human disease. The last several years have seen tremendous progress in our understanding of mono-ADP-ribosylation and NAD⁺. This is in large part due to key technological advances and growing interest in the field. Advances in mass spectrometry, chemistry, molecular biology, and high-throughput screening have all contributed to this growth.

These chapters were designed to bring you up to date with the current technologies. They provide detailed descriptions of the key assays and protocols used to study ADP-ribosylation and NAD⁺ utilizing enzymes. I hope you find these chapters useful for your studies. Thanks to all of the authors and copyeditors for your efforts.

Lexington, MA, USA

Paul Chang

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