
Preface

Modification of target protein properties by reversible phosphorylation events has been found as one of the most prominent cellular control processes in all organisms. Recent advances in the area of molecular biology and biochemistry, for instance mass spectrometry-based phosphoproteomics or fluorescence spectroscopical methods are opening new possibilities to reach an unprecedented depth and a proteome-wide understanding of phosphorylation processes in plants and other species. Moreover, the growing number of model species now allows deepening evolutionary insights into kinase/phosphatase systems and extracting general principles of regulation through phosphorylation.

The book *Plant Kinases* from the Methods in Molecular Biology™ series focuses on plant protein kinases and provides a compendium of state-of-the-art techniques that are written by experts in the field having hands-on experience with the particular methods. The major goal is to provide the experimentalist with a detailed account of the practical steps necessary for carrying out each protocol successfully in his or her own laboratory. We hope that both novice and seasoned researchers will find *Plant Kinases* a useful lab companion for years to come and that *Plant Kinases* will facilitate the practical work leading to new and exciting insights. Plant protein kinases specifically addressed in this book are members of the plant MAP kinase cascade, cyclin- and Calcium-dependent protein kinases, and plant sensor and receptor kinases.

We greatly acknowledge the contribution of the authors in writing this book and thank for the clear and detailed descriptions of the procedures and for many useful hints in the notes sections. We wish to acknowledge John M. Walker, the series editor, for his support, and the team at Humana Press and Springer for their help in producing this volume.

Let us get started: To the bench!

Halle (Saale), Germany
Strasbourg, France

Nico Dissmeyer
Arp Schnittger



<http://www.springer.com/978-1-61779-263-2>

Plant Kinases

Methods and Protocols

Dissmeyer, N.; Schnittger, A. (Eds.)

2011, X, 312 p., Hardcover

ISBN: 978-1-61779-263-2

A product of Humana Press