

# Contents

## **Part I Initiation of B Cell Receptor Signaling**

<b>Assembly and Function of the Precursor B-Cell Receptor . . . . .</b>	<b>3</b>
Rudolf Übelhart, Markus Werner and Hassan Jumaa	

<b>Receptor Dissociation and B-Cell Activation. . . . .</b>	<b>27</b>
Jianying Yang and Michael Reth	

<b>Molecular Mechanisms of B Cell Antigen Gathering and Endocytosis . . . . .</b>	<b>45</b>
Robbert Hooigeboom and Pavel Tolar	

## **Part II BTKs, Adaptors, and Effector System in B Cell Receptor Signaling**

<b>BTK Signaling in B Cell Differentiation and Autoimmunity . . . . .</b>	<b>67</b>
Odilia B.J. Corneth, Roel G.J. Klein Wolterink and Rudi W. Hendriks	

<b>The Memory Function of the B Cell Antigen Receptor . . . . .</b>	<b>107</b>
Jürgen Wienands and Niklas Engels	

<b>PI3K Signaling in Normal B Cells and Chronic Lymphocytic Leukemia (CLL) . . . . .</b>	<b>123</b>
Klaus Okkenhaug and Jan A. Burger	

<b>Role of Calcium Signaling in B Cell Activation and Biology . . . . .</b>	<b>143</b>
Yoshihiro Baba and Tomohiro Kurosaki	

**Part III Connection Between Cytoplasmic and Nuclear Events**

**Roles of the NF-κB Pathway in B-Lymphocyte Biology. . . . .** 177  
Yoshiteru Sasaki and Kazuhiro Iwai

**MAP Kinase Cascades in Antigen Receptor Signaling  
and Physiology . . . . .** 211  
Tomoharu Yasuda

B Cell Receptor Signaling

Kurosaki, T.; Wienands, J. (Eds.)

2016, X, 231 p., Hardcover

ISBN: 978-3-319-26131-7