

CONTENTS

Contributors

vii

1. Context- and Tissue-Specific Regulation of Immunity and Tolerance by Regulatory T Cells	1
A. Ulges, E. Schmitt, C. Becker, and T. Bopp	
1. Introduction	2
2. Origins of Treg Cells: "The Third Function of the Thymus (Seddon & Mason, 2000)"	3
3. Suppressive Properties of Treg Cells	8
4. Murine Tissue-Specific Treg Cells	16
5. Human Tissue-Resident Treg Cells	25
6. Conclusions	29
References	31
2. Endogenous Retroelements and the Host Innate Immune Sensors	47
X. Mu, S. Ahmad, and S. Hür	
1. Introduction	47
2. Toll-Like Receptors	49
3. RIG-I and MDA5	53
4. Protein Kinase R	58
5. Inflammasome	61
6. Conclusion and Perspectives	63
References	64
3. B-Lymphopoiesis in Fetal Liver, Guided by Chemokines	71
K. Kajikhina, M. Tsuneto, and F. Melchers	
1. Introduction	72
2. Lineage Choice Between Myeloid and Lymphoid Development	73
3. Cytokine Receptor Expressions on Early Progenitors in Fetal Liver	74
4. Changes of Transcription Factor Expressions and of Hematopoietic Differentiation Capacities During Myeloid/Lymphoid Progenitor Development	75
5. B-Cell Development from Early Fetal Liver Progenitors	78
6. Nonhematopoietic Mesenchymal Stromal Cells, but not Endothelial Cells, Produce Myeloid-Inducing CSF-1 and Lymphoid-Inducing IL7	80

7. Selective Chemokines Produced by Endothelium or Mesenchyme Guide Migration of Single Progenitors Expressing Several Chemokine Receptors from Blood to Hepatic Mesenchyme	81
8. Outlook	83
Acknowledgments	84
References	84
4. The Roles of the Secreted Phospholipase A₂ Gene Family in Immunology	91
M. Murakami, K. Yamamoto, Y. Miki, R. Murase, H. Sato, and Y. Taketomi	
1. General Aspects of sPLA ₂ s	92
2. Potential Roles of sPLA ₂ s: Lessons from sPLA ₂ Transgenic Mice	95
3. Group IIA sPLA ₂ (PLA2G2A)	96
4. Group IID sPLA ₂ (PLA2G2D)	100
5. Group IIF sPLA ₂ (PLA2G2F)	103
6. Group III sPLA ₂ (PLA2G3)	105
7. Group V sPLA ₂ (PLA2G5)	109
8. Group X sPLA ₂ (PLA2G10)	114
9. Other sPLA ₂ s and sPLA ₂ Receptor (PLA2R1)	119
10. Perspectives	121
Acknowledgments	123
References	123
5. Pleiotropic Roles of Type 1 Interferons in Antiviral Immune Responses	135
J.R. Teijaro	•
1. Type 1 Interferon Signaling During Acute Viral Infection	136
2. Type I Interferon Signaling and Persistent/Chronic Viral Infection	144
3. Perspective	150
References	152
Index	159
Contents of Recent Volumes	163