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VI. Membrane Dynamics and Actin Filament Turnover in Platelets VII. Platelet Contraction; VIII. Diseases of the Platelet Cytoskeleton; References; CHAPTER 5: Platelet Genomics and Proteomics; I. Introduction; II. Platelet Genomics; III. Platelet Proteomics; IV. Overview and Future Directions; Acknowledgment; References; CHAPTER 6: Platelet Receptors; I. Introduction; II. Integrins; III. Leucine-Rich Repeat (LRR) Family; IV. Seven Transmembrane Receptors; V. Immunoglobulin Superfamily; VI. C-Type Lectin Receptor Family; VII. Tetraspanins VIII. Glycosyl Phosphatidylinositol (GPI)-Anchored Proteins IX. Glycosaminoglycan-Carrying Receptors; X. Tyrosine Kinase Receptors; XI. Miscellaneous Platelet Membrane Glycoproteins; Acknowledgment; References; CHAPTER 7: The Glycoprotein Ib-IX-V Complex; I. Introduction/Structure; II. Function; III. Signaling; IV. The End of the Beginning; References; CHAPTER 8: Integrin  $\alpha$ IIb $\beta$ 3; I. Introduction; II.  $\alpha$ IIb $\beta$ 3 as an Integrin and a Platelet Protein; III. Structure of  $\alpha$ IIb $\beta$ 3; IV. "Inside-Out" Signaling and  $\alpha$ IIb $\beta$ 3 Activation; V. Conclusion; References; CHAPTER 9: Thrombin Receptors I. Introduction II. Cellular Actions of Thrombin; III. Role of PARs in Disease; IV. Molecular and Developmental Genetics of PARs; V. Thrombin Signaling in Platelets; VI. Development of PAR Inhibitors; References; CHAPTER 10: The Platelet P2 Receptors; I. Introduction; II. Roles of Adenine Nucleotides in Platelet Function; III. P2Y1; IV. P2Y12; V. P2X1; VI. Interplay between the Platelet P2 Receptors; VII. Desensitization of the Platelet P2 Receptors; VIII. Conclusions; References; CHAPTER 11: PECAM-1; I. Introduction; II. PECAM-1 Genomic Organization and Protein Domain Structure III. Expression and Adhesive Properties of the Extracellular Domain

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Sommario/riassunto

PLATELETS is the definitive current source of state-of-the-art knowledge about platelets and covers the entire field of platelet biology, pathophysiology, and clinical medicine. Recently there has been a rapid expansion of knowledge in both basic biology and the clinical approach to platelet-related diseases including thrombosis and hemorrhage. Novel platelet function tests, drugs, blood bank storage methods, and gene therapies have been incorporated into patient care or are in development. This book draws all this information into a single, comprehensive and authoritative resource.

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