

1. Record Nr.	UNINA9910784648503321
Titolo	Platelets [[electronic resource] /] / editor, Alan D. Michelson
Pubbl/distr/stampa	Amsterdam, : Elsevier Academic Press, c2007
ISBN	1-280-70758-5 9786610707584 0-08-046586-2
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (1386 p.)
Altri autori (Persone)	MichelsonAlan D
Disciplina	611.0185 612.17
Soggetti	Blood platelets Blood platelet disorders
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Front cover; PLATELETS; Copyright page; Table of contents; Contributors; Preface; Foreword: A Brief History of Ideas about Platelets in Health and Disease; Part One: Platelet Biology; CHAPTER 1: The Evolution of Mammalian Platelets; I. Introduction; II. Invertebrates; III. Nonmammalian Vertebrates; IV. Comparative Hemostasis; V. A Comparison of Human Platelets and Limulus Amebocytes; VI. The Evolution of Hemostasis and Blood Coagulation; VII. Megakaryocytes and Mammals; VIII. Conclusions; Acknowledgment; References; CHAPTER 2: Megakaryocyte Development and Platelet Formation; I. Introduction II. Megakaryocyte Development III. Platelet Formation; IV. Regulation of Megakaryocyte Development and Platelet Formation; V. Murine Model Systems and Human Diseases as Tools to Study Platelet Biogenesis; References; CHAPTER 3: Platelet Structure; I. Introduction; II. Peripheral Zone; III. The Sol-Gel Zone; IV. Organelle Zone; V. Platelet Membrane Systems; References; CHAPTER 4: The Platelet Cytoskeleton; I. Introduction; II. The Structure of the Resting Platelet; III. The Cytoskeleton of the Resting Platelet; IV. The Structure of the Activated Platelet; V. Signals Activating Actin Assembly 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 α IIb β 3; I. Introduction; II. α IIb β 3 as an Integrin and a Platelet Protein; III. Structure of α IIb β 3; IV. "Inside-Out" Signaling and α IIb β 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

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.
