1. Record Nr. UNINA9910298642403321

Titolo	The Blood Brain Barrier (BBB) / / edited by Gert Fricker, Melanie Ott, Anne Mahringer
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-662-43787-2
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (169 p.)
Collana	Topics in Medicinal Chemistry, , 1862-2461 ; ; 10
Disciplina	54 611.01816 615 615.19
Soggetti	Medicinal chemistry Molecular biology Pharmacology Medicinal Chemistry Molecular Medicine Pharmacology/Toxicology
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	""Preface""; ""Contents""; ""The Blood-Brain Barrier: An Introduction to Its Structure and Function""; ""1 The BBB: A Historical Perspective""; ""2 Evolutionary Development of a BBB""; ""3 Anatomic Principles of the BBB""; ""4 Pericytes""; ""5 Astrocyte: Endothelium Interactions""; ""6 Neurons""; ""7 Basal Membrane""; ""8 Junctional Complexes at the BBB""; ""9 Transport Proteins at the BBB""; ""10 Cytotic Processes at the BBB""; ""11 Outlook""; ""References""; ""In Vivo Approaches to Assessing the Blood-Brain Barrier""; ""1 Introduction"" ""2 Pharmacokinetic Principles of Blood-Brain Barrier Transport""""3 Methods""; ""3.1 Brain Uptake Index (Carotid Artery Single Injection Technique)""; ""3.2 The i.v. Injection Technique""; ""3.3 In Situ Brain Perfusion""; ""3.4 Brain Efflux Index""; ""3.5 Percentage of the Injected Dose""; ""3.6 Microdialysis""; ""3.7 CSF Sampling""; ""3.8 Positron Emission Tomography""; ""3.9 Combinatorial Mapping of Kp,uu,brain"";

""4 Conclusions""; ""References""; ""ABC Transporters at the Blood-Brain Barrier""; ""1 Introduction""; ""2 ABC Transporters at the Blood-Brain Barrier""
""2.1 Assessing ABC Transporter Activity/Expression""""""3 Modulation of ABC Transporter Expression and Activity""; ""3.1 Altered Transporter Expression""; ""3.1.1 Response to Xenobiotics""; ""3.1.2 Response to Disease""; ""3.2 Altered Transporter Activity Through Signaling"";
""3.2.1 Regulation of P-Glycoprotein Activity Through Sphingolipid Signaling""; ""3.2.2 Regulation of P-Glycoprotein Activity Through VEGF Signaling""; ""3.2.3 Regulation of BCRP Activity Through Estrogen Signaling""; ""3.2.4 Mechanisms Underlying Decreased Transporter Activity""; ""4 Perspectives""; ""References""
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""2.2 Methoxypoly(ethylene glycol)-polylactide or Poly(lactide-co-glycolide) (mPEG-PLA/PLGA) NPs""; ""2.3 Liposomes""; ""2.4 Inorganic Nanosystems""; ""3 Conclusions""
""References""""""Blood-Brain Barrier and Stroke""; ""1 Introduction""; ""2 Injury to BBB Cell Components After Stroke""; ""2.1 Endothelial Cells"";
""2.2 Pericytes""; ""2.3 Astrocytes""; ""3 Basement Membrane, Extracellular Matrix, and Stroke""; ""4 Systemic and Local Inflammation and BBB Permeability After Stroke""; ""4.1 Chemokines, Adhesion Molecules, and Leukocyte Trafficking""; ""4.2 Parenchymal Brain Cells"";
""4.3 Perivascular Inflammatory Cells""; ""5 Post-ischemic Vascular and Brain Repair""; ""6 BBB Responses to Stroke in the Perinatal Period""
""7 BBB Integrity, Angiogenesis, and Brain Repair After Stroke During the Perinatal Period""

Sommario/riassunto

Medicinal chemistry is both science and art. The science of medicinal chemistry offers mankind one of its best hopes for improving the quality of life. The art of medicinal chemistry continues to challenge its practitioners with the need for both intuition and experience to discover new drugs. Hence sharing the experience of drug research is uniquely beneficial to the field of medicinal chemistry. Drug research requires interdisciplinary team-work at the interface between chemistry, biology and medicine. Therefore, the topic-related series Topics in Medicinal Chemistry covers all relevant aspects of drug research, e.g. pathobiochemistry of diseases, identification and validation of (emerging) drug targets, structural biology, drugability of targets, drug design approaches, chemogenomics, synthetic chemistry including combinatorial methods, bioorganic chemistry, natural compounds, high-throughput screening, pharmacological in vitro and in vivo investigations, drug-receptor interactions on the molecular level, structure-activity relationships, drug absorption, distribution, metabolism, elimination, toxicology and pharmacogenomics. In general, special volumes are edited by well known guest editors.