

Contents

Preface	<i>v</i>
Contributors	<i>xi</i>
1 • Regulation of Monoamine Transporters: <i>Regulated Phosphorylation, Dephosphorylation, and Trafficking</i>	1
Sammanda Ramamoorthy	
2 • Mechanisms of Biogenic Amine Neurotransmitter Transporters	25
Gary Rudnick	
3 • Structure-Function Relationships for Biogenic Amine Neurotransmitter Transporters	53
Nian-Hang Chen and Maarten E. A. Reith	
4 • Gene Organization and Polymorphisms of Monoamine Transporters: <i>Relationship to Psychiatric and Other Complex Diseases</i>	111
Maureen K. Hahn and Randy D. Blakely	
5 • Monoamine Transporters: <i>Their Role in Maintaining Neuronal Homeostasis</i>	171
Raul R. Gainetdinov and Marc G. Caron	
6 • Family of Sodium-Coupled Transporters for GABA, Glycine, Proline, Betaine, Taurine, and Creatine: <i>Pharmacology, Physiology, and Regulation</i>	193
Scott L. Deken, Robert T. Freneau, Jr., and Michael W. Quick	
7 • Sodium-Coupled GABA and Glutamate Transporters: <i>Structure and Function</i>	235
Baruch I. Kanner	

8 • The High-Affinity Glutamate and Neutral Amino-Acid Transporter Family: <i>Structure, Function, and Physiological Relevance</i>	255
Yoshikatsu Kanai, Davide Trotti, Urs V. Berger, and Matthias A. Hediger	
9 • Vesicular Neurotransmitter Transporters: <i>Pharmacology, Biochemistry, and Molecular Analysis</i>	313
Rodrigo Yelin and Shimon Schuldiner	
10 • Neurotransmitter-Transporter Proteins: <i>Post-Translational Modifications</i>	355
Amrat P. Patel and Maarten E. A. Reith	
11 • Dopamine-Transporter Uptake Blockers: <i>Structure-Activity Relationships</i>	381
F. Ivy Carroll, Anita H. Lewin, and S. Wayne Mascarrella	
12 • Imaging the Brain Dopamine Transporter Using PET and SPECT	433
S. John Gatley, Nora D. Volkow, Joanna S. Fowler, Yu-Shin Ding, Jean Logan, Gene-Jack Wang, Christoph Felder, Frank W. Telang, and Andrew N. Gifford	
13 • In Vitro and In Vivo Imaging of the Human Dopamine Transporter in Cocaine Abusers	467
Deborah C. Mash and Julie K. Staley	
Index	503



<http://www.springer.com/978-0-89603-945-2>

Neurotransmitter Transporters
Structure, Function, and Regulation

Reith, M. (Ed.)

2002, XII, 518 p., Hardcover

ISBN: 978-0-89603-945-2

A product of Humana Press