Record Nr. UNINA9910918596703321

Autore Mathew Bijo

Titolo Enzymes in Neurodegenerative Disorders : Mechanism and Therapeutic

Potentials / / edited by Bijo Mathew, Della Grace Thomas Parambi

Pubbl/distr/stampa Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2024

Singapore . , . Opiniger Nature Singapore . , . Impinit . Opiniger, , 2024

ISBN 9789819768226

9789819768219

Edizione [1st ed. 2024.]

Descrizione fisica 1 online resource (195 pages)

Altri autori (Persone) ParambiDella Grace Thomas

Disciplina 612.8

Soggetti Neurosciences

Nervous system - Diseases

Neurophysiology

Neurons Enzymology Neuroscience

Neurological Disorders Cellular Neuroscience

Lingua di pubblicazione Inglese

Formato Materiale a stampa

Livello bibliografico Monografia

Nota di contenuto Chapter 1. Introduction of enzymes in neurodegenerative disorders --

Chapter 2. Role of enzymes in Alzheimer's disease -- Chapter 3. Role of enzymes in amyotrophic lateral sclerosis -- Chapter 4. Enzymes involved in multiple sclerosis -- Chapter 5. Role of enzymes in epilepsy -- Chapter 6. Role of enzymes in Huntington's disease -- Chapter 7. Role of enzymes in Parkinson's disease -- Chapter 8. Role of enzymes in Prion disease: Molecular mechanism -- Chapter 9. Modulation of several downstream cascades served by enzymes in the pathogenesis of stroke -- Chapter 10. Future directions and challenges in enzyme

research for neurodegenerative diseases.

Sommario/riassunto This book delves into the correlation between different enzymes and

neurodegenerative disorders. It investigates the intricate processes that contribute to the decline of cognitive functions, memory impairment, and other incapacitating symptoms of Alzheimer's disease. The book examines the roles of diverse enzymes in Amyotrophic Lateral Sclerosis

and their effects on the motor neurons, leading to muscle weakness, paralysis, and eventual fatality. Moreover, it examines the association between depression and the enzymes responsible, providing a fresh viewpoint on the biochemical foundation of this ailment. Lastly, the book explores the connection between enzymes and Parkinson's disease, discussing the mechanisms that cause the death of dopamine-producing neurons and the related symptoms. By examining the functions of various enzymes in Parkinson's disease, the book presents a distinct outlook on the intricate interplay between enzymes and several neurological conditions, imparting readers with a comprehensive understanding of the fundamental mechanisms that underlie these disorders.