

1. Record Nr.	UNINA9911010533703321
Autore	Patil Vaishali Manikrao
Titolo	Deciphering The Role of Succinate Dehydrogenase in Drug Discovery : SDH in Drug Discovery // edited by Vaishali Manikrao Patil, Dileep Kumar, Satya P. Gupta
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2025
ISBN	981-9668-31-X
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (439 pages)
Altri autori (Persone)	KumarDileep GuptaSatya P
Disciplina	353.998
Soggetti	Pharmacovigilance Drug delivery systems Medicine - Research Biology - Research Pharmacology Drug Safety and Pharmacovigilance Drug Delivery Biomedical Research
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Succinate Dehydrogenase: Structure, Function and Significance -- Chapter 2. The Function of Succinate Dehydrogenase in Maintaining Normal Health -- Chapter 3. Role of Succinate Dehydrogenase in Cellular Respiration -- Chapter 4. Succinate Dehydrogenase: An Important Target in Drug Discovery for Tropical and Neglected Diseases -- Chapter 5. Succinate Dehydrogenase in Mitochondrial Disorders -- Chapter 6. Role of SDH in Cardiovascular Disorders -- Chapter 7. Implication of Succinate Dehydrogenase in Cancer -- Chapter 8. SDH and its Impact on Neurodegenerative Diseases: Autophagy in Neuroinflammation Perspective -- Chapter 9. Neurodegenerative Diseases and Succinate Dehydrogenase: A Therapeutics Avenue for Treatment -- Chapter 10. Fungicidal SDH Inhibitors in Agriculture: Regulation and Future Perspectives -- Chapter 11. Metabolic Disorders and Succinate Dehydrogenase.

The book explores various aspects of Succinate Dehydrogenase (SDH) (an enzyme crucial for cellular respiration and energy production) from its assembly and regulation mechanisms to its deficiency and its implications in related disorders. It also encompasses the impact of SDH in obstructive pulmonary disorders, discussing its potential contributions and implications. It explores the design and development of SDH inhibitors as potent agent against fungal infections. It further examines the relationship between SDH mutations and cancer development, linking genetic alterations to tumorigenesis. The book focuses on therapeutic strategies and highlights the role of SDH in managing gastrointestinal tumors, neurodegenerative disorders, and aging-related diseases. It navigates through the challenges and prospects of utilizing SDH as a target for therapeutic interventions. The book also dives into the diagnostic aspects of SDH defects, elucidating their implications and potential diagnostic investigations. It serves as a comprehensive guide to unravel SDH's functions, dysfunctions, and therapeutic potentials. By amalgamating diverse areas such as enzymology, genetics, pharmacology, and disease management, this book emerges as an invaluable resource for researchers, clinicians, and students alike.
