
Contents

1 Enzymology of Hydrogen Sulfide Turnover	1
Nicole Motl, Pramod Yadav, and Ruma Banerjee	
2 Hydrogen Sulfide as an Oxygen Sensor	37
Kenneth R. Olson	
3 Multiple Roles of H₂S in Inflammation: A New Class of Therapeutics?	63
Ling Li, Mohamed Shirhan Bin Mohamed, and Philip K. Moore	
4 Signaling Mechanisms Underlying the Hydrogen Sulfide Effects: Identification of Hydrogen Sulfide “Receptors”	83
Yi-Chun Zhu	
5 Hydrogen Sulfide: Its Production, Release and Functions	109
Kyle L. Flannigan and John L. Wallace	
6 Hydrogen Sulfide: Physiological and Pathophysiological Functions	127
Yi Tong Liu and Jin-Song Bian	
7 Biological Effects of H₂S Inhalation and Its Therapeutic Potential	157
Fumito Ichinose	
8 H₂S as a Bacterial Defense Against Antibiotics	173
Lyly Luhachack and Evgeny Nudler	
9 Hydrogen Sulfide-Mediated Cellular Signaling and Cytoprotection	181
Hideo Kimura	
Index	203

Hydrogen Sulfide and its Therapeutic Applications

Kimura, H. (Ed.)

2013, IX, 207 p. 39 illus., 23 illus. in color.,

ISBN: 978-3-7091-1550-3