DESCRIPTION

An insightful reference for the latest physiological and therapeutic studies of carbon monoxide

In Carbon Monoxide in Drug Discovery: Basics, Pharmacology, and Therapeutic Potential, a team of distinguished authors delivers foundational knowledge, the latest research, and remaining challenges regarding the physiological roles and therapeutic efficacy of carbon monoxide (CO). The editors have included a broad selection of resources from leading experts in the field that discuss the background and physiological roles of CO, a variety of delivery forms including CO prodrugs using benign carriers, CO sensing, therapeutic applications, and clinical trials.

Organized by topic to allow each chapter to be read individually, the book covers a wide range of topics, from physiological and pathophysiological mechanisms at the molecular level to clinical applications for multiple disease processes.

The editors of Carbon Monoxide in Drug Discovery have created a compelling argument for shifting the accepted understanding of CO from poison to bioactive molecule with enormous clinical benefits. Readers will also benefit from:

• A thorough introduction to the background and physiological actions of carbon monoxide, including endogenous CO production in sickness and in health

• Comprehensive explorations of CO delivery forms, including non-carrier formulations, metal-carbonyl complexes, and organic CO donors
• Practical discussions of carbon monoxide sensing and scavenging, including fluorescent probes for intracellular carbon monoxide detection

• In-depth examinations of the therapeutic applications of CO, including CO in solid organ transplantation

Perfect for professors, graduate students, and postdocs in the fields of biology, pharmacology, immunology, medicinal chemistry, toxicology, and drug delivery, *Carbon Monoxide in Drug Discovery: Basics, Pharmacology, and Therapeutic Potential* is also an invaluable resource for industrial scientists in these areas.