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Sommario/riassunto

"There has been explosive growth in the hunt for new pharmaceutically agents globally. Traditionally, this has been the purview of the pharmaceutical industry, but today, this effort crosses academic, government, and industry laboratories across the world. Enzymes remain the most valued and common of drug targets; hence, a detailed understanding of their interactions with inhibitors is critical to successful drug discovery. This book provides a practical, readable, and comprehensive treatment of these topics that allows scientists to master the art of applied enzymology for drug discovery. The book addresses the opportunities for inhibitor interactions with enzyme targets arising from consideration of the catalytic reaction mechanism; discusses how inhibitors are properly evaluated for potency, selectivity, and mode of action, covers the potential advantages and liabilities of specific inhibition modalities with respect to efficacy in vivo, and provides valuable biochemical insights to help medicinal chemists and pharmacologists most effectively pursue lead optimization. It includes two new chapters, one on the pioneering idea of drug-target residence time fostered by Dr. Copeland, and the second on quantitative biochemistry. Five new appendices are added"--Provided by publisher.