Record Nr. UNINA9910139201903321 GPCR molecular pharmacology and drug targeting [[electronic resource] **Titolo**] : shifting paradigms and new directions / / edited by Annette Gilchrist Pubbl/distr/stampa Hoboken, N.J., : Wiley, c2010 **ISBN** 1-118-03517-8 1-282-68599-6 9786612685996 0-470-62732-8 0-470-62731-X Descrizione fisica 1 online resource (544 p.) Altri autori (Persone) GilchristAnnette Disciplina 612/.015756 G proteins Soggetti Drug targeting Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto GPCR MOLECULAR PHARMACOLOGY AND DRUG TARGETING: SHIFTING PARADIGMS AND NEW DIRECTIONS; CONTENTS; PREFACE; CONTRIBUTORS; CHAPTER 1: The Evolution of Receptors: From On-Off Switches to Microprocessors; CHAPTER 2: The Evolving Pharmacology of GPCRs; CHAPTER 3: The Emergence of Allosteric Modulators for G Protein - Coupled Receptors: CHAPTER 4: Receptor-Mediated G Protein Activation: How, How Many, and Where?; CHAPTER 5: Molecular Pharmacology of Frizzleds-with Implications for Possible Therapy CHAPTER 6: Secretin Receptor Dimerization: A Possible Functionally Important Paradigm for Family B G Protein-Coupled ReceptorsCHAPTER 7: Past and Future Strategies for GPCR Deorphanization; CHAPTER 8: High-Throughput GPCR Screening Technologies and the Emerging Importance of the Cell Phenotype; CHAPTER 9: Are "Traditional" Biochemical Techniques Out of Fashion in the New Era of GPCR Pharmacology?; CHAPTER 10: Fluorescence and Resonance Energy Transfer Shine New Light on GPCR Function; CHAPTER 11: Integration of Label-Free Detection Methods in GPCR Drug Discovery

CHAPTER 12: Screening for Allosteric Modulators of G Protein-Coupled

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Sommario/riassunto

G protein-coupled receptors (GPCRs) are a large protein family of transmembrane receptors vital in dictating cellular responses. GPCRs are involved in many diseases, but are also the target of around half of all modern medicinal drugs. Shifting Paradigms in G Protein Coupled Receptors takes a look at the way GPCRs are examined today, how they react, how their mutations lead to disease, and the many ways in which they can be screened for compounds that modulate them. Chemists, pharmacologists, and biologists will find essential information in this comprehensive reference.