Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses)

Taotao Zou

Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses)

Taotao Zou

Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) Taotao Zou

This thesis focuses on the development of gold- and non-classical platinum-based anti-cancer agents that display distinctively different anti-cancer mechanisms compared to the commonly used cisplatin. These metal complexes contain N-heterocyclic carbene (NHC) ligands which are able to form strong M-C(NHC) bonds, conferring high stability and favorable lipophilicity, reactivity and binding specificity of metal complexes on biomolecules. The author demonstrates significant advances made in anti-cancer gold(III), gold(I) and platinum(II) complexes. Detailed chemical synthesis, in vitro and/or in vivo anti-cancer activities are clearly presented including: (i) a class of Au(III) complexes containing a highly fluorescent N^N^N ligand and NHC ligand that simultaneously act as fluorescent thiol “switch-on” probes and anti-cancer agents; (ii) a dinuclear gold(I) complex with a mixed diphosphine and bis(NHC) ligand displaying favorable stability and showing significant inhibition of tumor growth in two independent mice models with no observable side effects; and (iii) a panel of stable luminescent cyclometalated platinum(II) complexes exhibiting high specificity to localize to the endoplasmic reticulum (ER) domain, inducing ER stress and cell apoptosis. These works highlight the clinical potential that gold and platinum complexes offer for cancer treatment.

Download and Read Free Online Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) Taotao Zou

---

From reader reviews:

Shawn Macdonald:

This Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) book is absolutely not ordinary book, you have after that it the world is in your hands. The benefit you get by reading this book is definitely information inside this publication incredible fresh, you will get data which is getting deeper a person read a lot of information you will get. That Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) without we recognize teach the one who reading it become critical in imagining and analyzing. Don't possibly be worry Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) can bring if you are and not make your carrier space or bookshelves' turn into full because you can have it in the lovely laptop even cell phone. This Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) having good arrangement in word as well as layout, so you will not feel uninterested in reading.

Judith Lucas:

This book untitled Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) to be one of several books in which best seller in this year, honestly, that is because when you read this e-book you can get a lot of benefit onto it. You will easily to buy this specific book in the book shop or you can order it by using online. The publisher in this book sells the e-book too. It makes you more easily to read this book, as you can read this book in your Smart phone. So there is no reason to you personally to past this e-book from your list.

Mary Logsdon:

Do you have something that you want such as book? The reserve lovers usually prefer to pick book like comic, short story and the biggest an example may be novel. Now, why not attempting Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) that give your satisfaction preference will be satisfied by simply reading this book. Reading practice all over the world can be said as the way for people to know world considerably better then how they react toward the world. It can't be claimed constantly that reading practice only for the geeky man or woman but for all of you who wants to possibly be success person. So , for all of you who want to start reading through as your good habit, you may pick Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) become your starter.

John Keys:

Reading a book to get new life style in this year; every people loves to go through a book. When you study a book you can get a wide range of benefit. When you read ebooks, you can improve your knowledge, because book has a lot of information on it. The information that you will get depend on what sorts of book that you have read. If you want to get information about your research, you can read education books, but if you act like you want to entertain yourself you can read a fiction books, such us novel, comics, and also soon. The Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) provide you with new experience in looking at a book.

Read Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) by Taotao Zou for online ebook

Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) by Taotao Zou Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) by Taotao Zou books to read online.

Online Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) by Taotao Zou ebook PDF download

Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) by Taotao Zou Doc

Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) by Taotao Zou Mobipocket

Anti-Cancer N-Heterocyclic Carbene Complexes of Gold(III), Gold(I) and Platinum(II): Thiol "Switch-on" Fluorescent Probes, Thioredoxin Reductase ... Reticulum Targeting Agents (Springer Theses) by Taotao Zou EPub