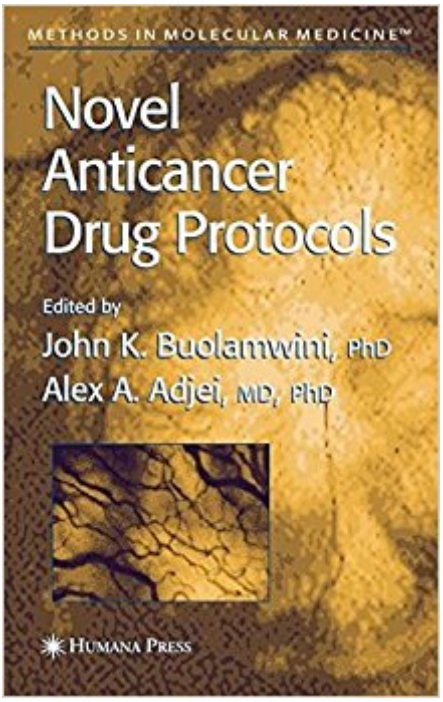
# Novel Anticancer Drug Protocols (Methods In Molecular Medicine)



## Synopsis

We are in an exciting era in the war against cancer, with real prospects for novel anticancer drugs that are cancer cell-specific without the toxicities that have been the hallmark of conventional cytotoxic cancer chemotherapy. Advances in cancer cell biology fueled by the molecular biology revolution have resulted in the uncovering of many novel potential molecular targets for cancer therapy. New anticancer drug discovery and development is now largely focused on exploiting these new molecular targets, which encompass oncogenes, tumor s- pressor genes, and their gene products, as well as targets involved in tumor angiogenesis, metastasis, survival, and longevity mechanisms. Exploitation of some of these targets has already yielded fruits and introduced new paradigms of molecularly targeted cancer therapy into the clinic, namely, protein kinase in- bition by antibodies or small molecules, exemplified by HerceptinÃ Â® (trastuzumab), a humanized antibody targeted against the HER-2 growth factor receptor tyrosine kinase for the treatment of metastatic breast cancer; and Gleevec, a small molecule bcr-abl kinase inhibitor for the treatment of chronic myel- enous leukemia.

## Book Information

Series: Methods in Molecular Medicine (Book 85)

Hardcover: 355 pages

Publisher: Humana Press; 2003 edition (March 26, 2003)

Language: English

ISBN-10: 0896039633

ISBN-13: 978-0896039636

Product Dimensions: 6 x 1 x 9 inches

Shipping Weight: 1.6 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #8,178,019 in Books (See Top 100 in Books) #32 inÃ Â Books > Medical Books > Pharmacology > Molecular #5986 inÃ Â Books > Medical Books > Pharmacology > Pharmacy #8240 inÃ Â Books > Medical Books > Medicine > Internal Medicine > Oncology

## Customer Reviews

With many potential molecular targets of anticancer agents already identified and many more yet to be discovered, the great challenges are now to successfully validate them, to devise relevant assays, and to translate the results into effective medicines for cancer patients. In Novel Anticancer Drug Protocols, expert basic researchers and clinicians from both industry and academia not only

survey the whole arena of novel antitumor drug targets, but also present a wide-ranging selection of the key techniques currently being applied throughout anticancer drug discovery and development. Described in step-by-step detail to ensure successful results, these methods are employed in experiments involving such central topics as immunotherapy, angiogenesis, cancer metastasis, the cell cycle, signal transduction inhibitors, apoptosis, antibodies, antisense molecules, microarray gene expression analysis, flow cytometry, and PET imaging for cancer target validation. There are also proven methods for the preclinical identification of drug targets and for target validation during the clinical trials of novel agents. Each method provides background information, easy-to-follow instructions, notes on avoiding pitfalls, and alternative procedures.  Eminently practical and user-friendly, Novel Anticancer Drug Protocols offers all researchers involved in cancer drug development a blend of the critical preclinical and clinical assays needed for the target validation and discovery of novel agents today.