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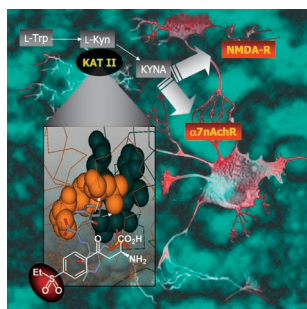
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Some articles in this issue have already appeared online in Wiley InterScience. See [www.chemmedchem.org](http://www.chemmedchem.org) under EarlyView®

## COVER PICTURE



The cover picture shows one branch of the kynurenine pathway of tryptophan metabolism, which is mainly localized in astrocytes. One key metabolite, kynurenic acid (KYNA), is transported in the extracellular space, where it modulates synaptically localized  $\alpha 7$  nicotinic acetylcholine receptors and NMDA receptors. The inset shows the active site of kynurenine aminotransferase II (KAT II), the enzyme that synthesizes KYNA in the CNS, and the structure of (*S*)-4-(ethylsulfonyl)benzoylalanine, a potent and selective KAT II inhibitor. Selective inhibition of KAT II may have a fundamental role in the understanding of CNS processes related to cognitive function. For more details, see the Communication by R. Pellicciari et al. on p. 528 ff. (Daniele Bellocchi is acknowledged for the cover image.)

## NEWS

From our sister journals

500 – 501

## REVIEWS

**Targeting the nuclear receptors:** The ligand-binding domain of the glucocorticoid receptor (ribbon) bound with the ligand, dexamethasone (space-filling) is just one of the many pictures that are becoming clearer in the field of nuclear receptor (NR) research. Recent developments in drug discovery show great promise for the treatment of many NR-related diseases.



J. T. Moore, J. L. Collins, K. H. Pearce\*

504 – 523

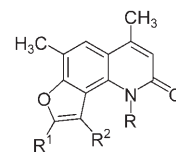
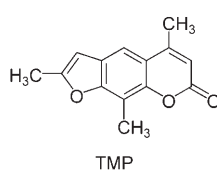
**The Nuclear Receptor Superfamily and Drug Discovery**

## COMMUNICATIONS

F. Bettio, F. Baccichetti, M. Simonato,  
C. Marzano, F. Bordin\*

525 – 527

**T4 Phage Photoinactivation by Linear  
Furocoumarins and Angular  
Furoquinolinones**



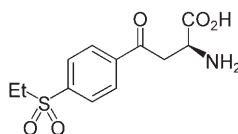
**TMP, FQ, and HFQ kill T4 phage** under mild experimental conditions in its virion form, but not in its vegetative form. The process occurs through a two-step irradiation procedure, charac-

teristic of DNA bifunctional lesions. We hypothesize the induction of DNA–protein cross-links in mature phages that can inhibit the infection process.

R. Pellicciari,\* R. C. Rizzo, G. Costantino,  
M. Marinozzi, L. Amori, P. Guidetti,  
H.-Q. Wu, R. Schwarcz

528 – 531

**Modulators of the Kynurenine  
Pathway of Tryptophan Metabolism:  
Synthesis and Preliminary Biological  
Evaluation of (S)-4-  
(Ethylsulfonyl)benzoylalanine, a  
Potent and Selective Kynurenine  
Aminotransferase II (KAT II) Inhibitor**



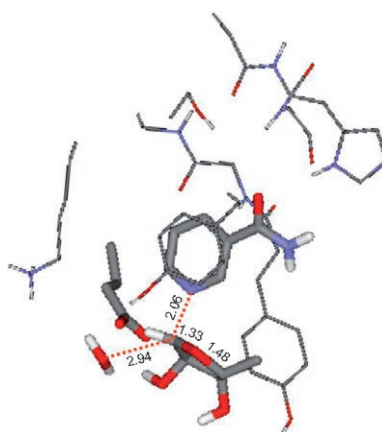
**(S)-4-(Ethylsulfonyl)benzoylalanine** is a potent and selective inhibitor of kynurenine aminotransferase II (KAT II) with no significant effect on KAT I or other enzymes of the kynurenine pathway. This compound is able to pronouncedly inhibit the formation of kynurenic acid (KYNA) in rat brain.

## FULL PAPERS

D. Bellocchi, G. Costantino, R. Pellicciari,\*  
N. Re,\* A. Marrone, C. Coletti

533 – 539

**Poly(ADP-Ribose)-Polymerase-  
Catalyzed Hydrolysis of NAD<sup>+</sup>:  
QM/MM Simulation of the  
Enzyme Reaction**

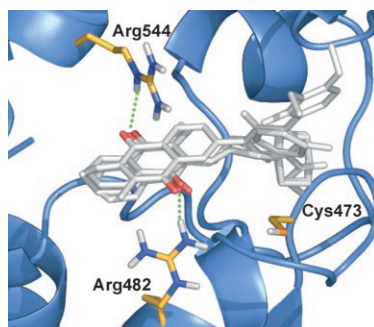


**Poly(ADP-ribose) polymerase**, a nuclear enzyme activated by DNA single-strand breaks, is an attractive target for a variety of diseases. A combined quantum mechanics/molecular mechanics study was performed with the aim of gaining insight into the catalytic mechanism of PARP-mediated hydrolysis. The results obtained are useful for the design of transition-state analogues as inhibitors.

A. Lavecchia,\* S. Cosconati, V. Limongelli,  
E. Novellino

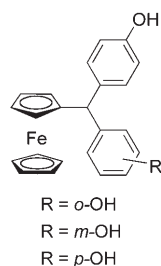
540 – 550

**Modeling of Cdc25B Dual Specificity  
Protein Phosphatase Inhibitors:  
Docking of Ligands and Enzymatic  
Inhibition Mechanism**



**Using the crystal structure** of Cdc25B, we performed docking simulations to produce structural models for the interaction of different Cdc25B inhibitors with this enzyme. The coherent picture of possible interactions of the inhibitors with the active site provides an improved basis for structure-based ligand design and suggests a possible explanation for the inhibition mechanism.

**Ferrocenyl phenolic complexes** show good affinity for estrogen receptors and significant cytotoxic effects on one prostate and two breast cancer cell lines. Electrochemical studies show that the cytotoxic effect of the complexes correlates with the ease of oxidation of the ferrocene group.

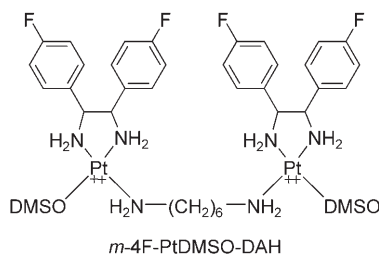


*E. Hillard, A. Vessières, F. Le Bideau, D. Plazuk, D. Spera, M. Huché, G. Jaouen\**

551 – 559

## A Series of Unconjugated Ferrocenyl Phenols: Prospects as Anticancer Agents

**Quick on the uptake:** The dinuclear platinum complex *m*-4F-PtDMSO-DAH is taken up through adsorptive macropinocytosis into MCF-7 breast cancer cells. A detailed study of this drug has shed light on the endocytotic uptake of other such polynuclear platinum compounds by cancer cells.

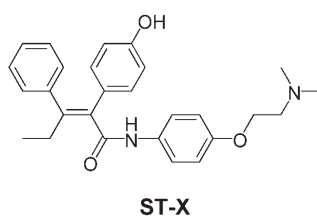


*T. Kapp, S. Müller, R. Gust\**

560 – 564

## Dinuclear Alkylamine Platinum(II) Complexes of [1,2-Bis(4-fluorophenyl)ethylenediamine]-platinum(II): Influence of Endocytosis and Copper and Organic Cation Transport Systems on Cellular Uptake

**ST-X is a selective** estrogen receptor modulator that shows no binding affinity for the nuclear ER $\alpha$  or ER $\beta$  and no uterotrophic action in guinea pigs or mice. This suggests that ST-X action involves a novel receptor that is distinct from the nuclear ERs.



*S. C. Tobias, J. Qiu, M. J. Kelly, T. S. Scanlan\**

565 – 571

## Synthesis and Biological Evaluation of SERMs with Potent Nongenomic Estrogenic Activity

Supporting information on the WWW (see article for access details).

\* Author to whom correspondence should be addressed.

## BOOKS

**Drug Discovery Handbook** · S. C. Gad (Ed.)

*Giorgio Tarzia* ..... 572

## SERVICE

Author Index ..... 573      Preview ..... 574

Keyword Index ..... 573

All the Tables of Contents may be found on the WWW under:  
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Issue 4, 2006, was published online on March 29, 2006.

*ChemMedChem* is indexed in *Chemical Abstracts Service/SciFinder*, *ChemInform*, *Chemistry Citation Index*, *COMPENDEX*, *EMBASE/Excerpta Medica*, *EMNursing*, *GEODATABASE/Geographical & Geological Abstracts*, *Mosby Yearbooks*, and *SCOPUS*.

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### Typesetting, Printing and Binding:

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