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Bioorganic & Medicinal Chemistry Letters

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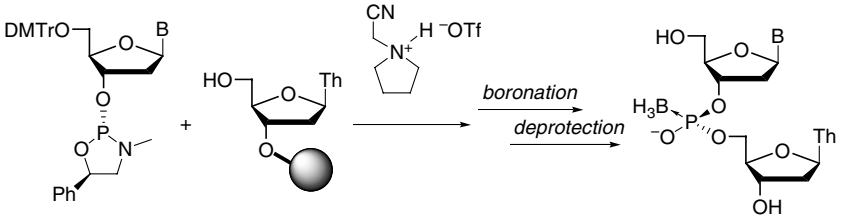
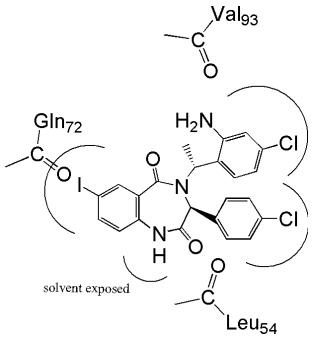
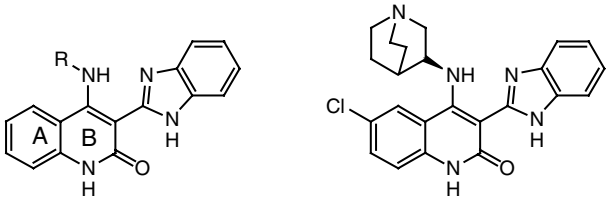
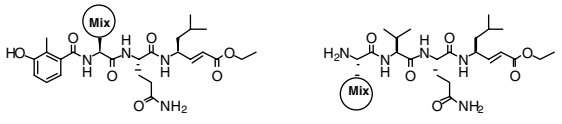
Contents

ARTICLES

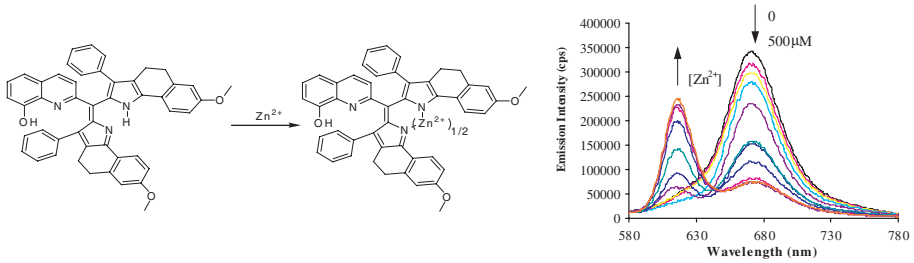




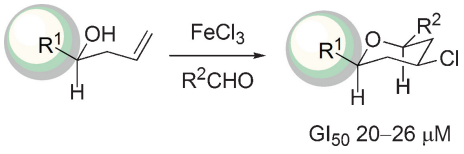




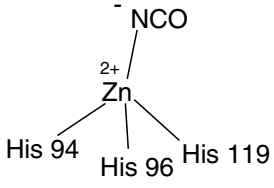
Here following is the report on the use of small, focused libraries to study P3 and P4 positions of vinyl ester pseudopeptides, selective inhibitors for trypsin-like activity of the 20S proteasome.

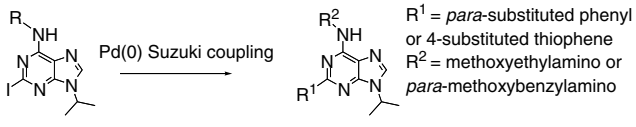


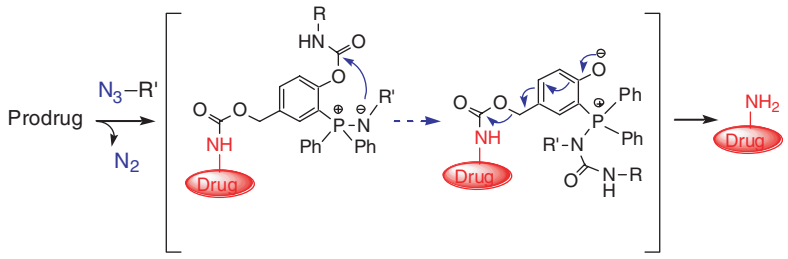
8-Hydroxyquinolinedipyrrin derivative ratiometric chemosensors were designed, prepared, and shown to have a high selectivity and sensitivity for Zn^{2+} ions.



The in vitro antitumor activity of 2,6-dialkyl-4-chloro-tetrahydropyrans against human solid tumor cells is reported.

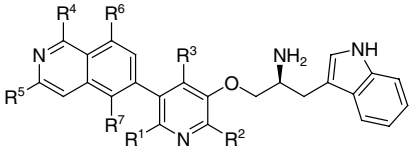


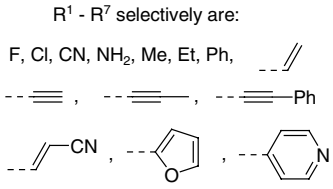


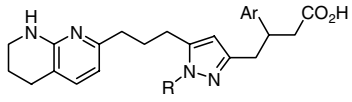


Herein we describe a new way to liberate a drug from a prodrug using the Staudinger ligation as the trigger.

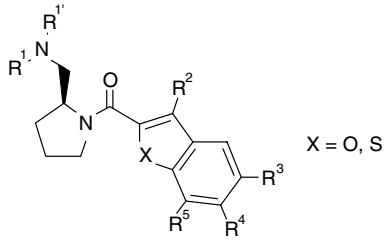
A series of 27 isoquinoline–pyridine-based derivatives were synthesized and evaluated as protein kinase B/Akt antagonists. An amino analog ($R^5 = NH_2$) demonstrated good efficacy in a mouse MiaPaCa-2 xenograft model, but with accompanying toxicity.



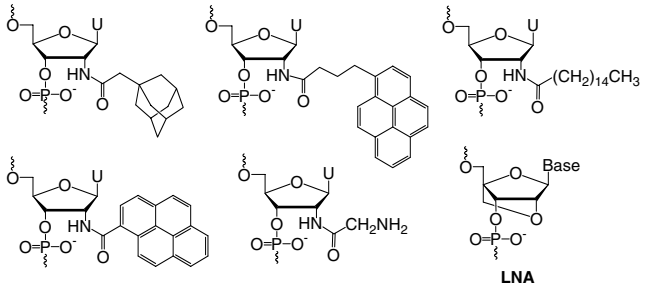


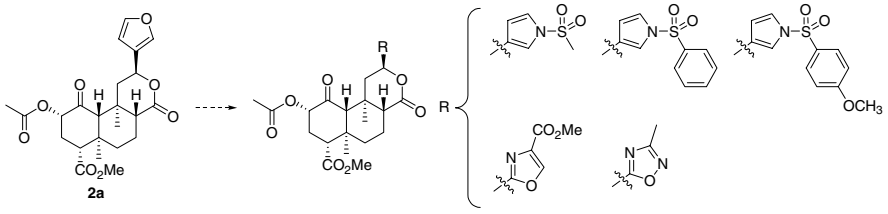


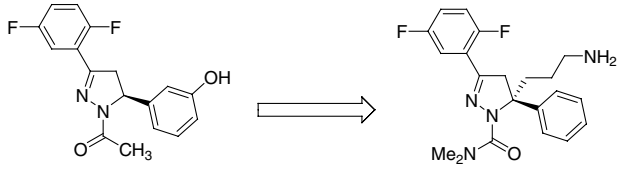
The synthesis and biological evaluation of a series of pyrazole and isoxazole $\alpha_v\beta_3$ antagonists is described.

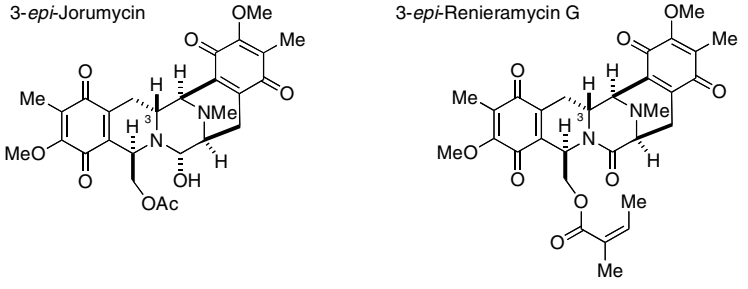


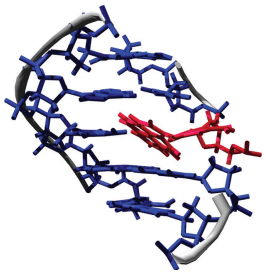
Benzo[*b*]thiophene-2-carboxamides and benzo[*b*]furan-2-carboxamides are potent antagonists on the human H_3-receptor, showing K_i values of as low as 4 nM.

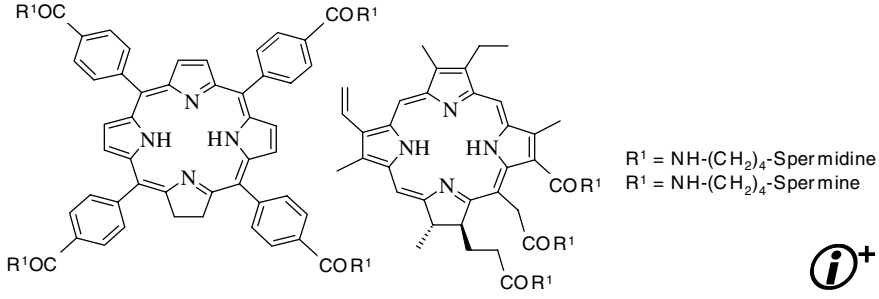


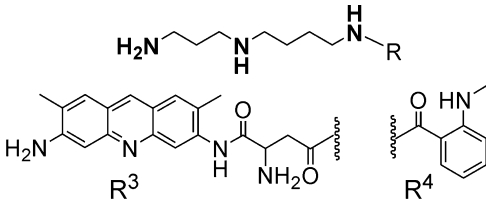


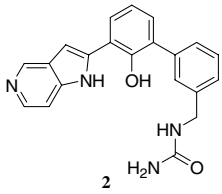












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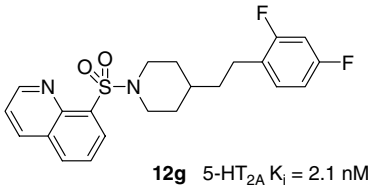
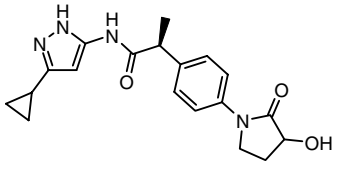
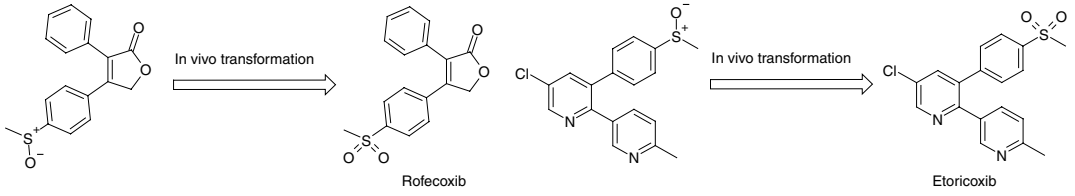


12g 5-HT_{2A} K_i = 2.1 nM

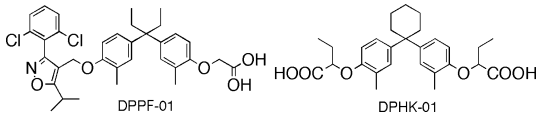
This paper describes the design of a novel series of non-basic 5-HT_{2A} receptor antagonists thus disproving the generally accepted view that a basic nitrogen is crucial to binding at this receptor.



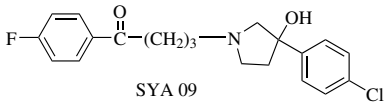
The synthesis of the metabolite of a potent 3-aminopyrazole CDK2/cyclin A inhibitor is presented. The use of polymer-supported cyanoborohydride in trifluoroethanol proved most convenient in the reductive amination step.



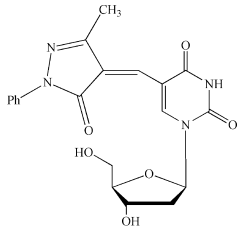
The enantiomeric synthesis and profiling of sulfoxide-based rofecoxib and etoricoxib (Merck) prodrugs are reported.



Design and preparation of novel ligands for FXR, DPPF-01, and for PPARα, DPHK-01, were described.

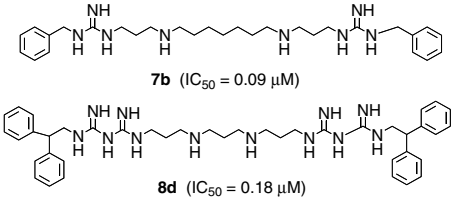


SYA 09

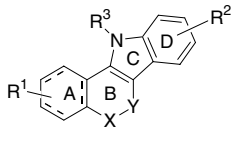


9

5-Formyl-2′-deoxyuridine was condensed with 1-phenyl-3-methyl-2-pyrazolin-5-one to give a novel pyrimidinylidene–pyrazolone nucleoside (**9**) with potent in vitro anti-orthopoxvirus properties.

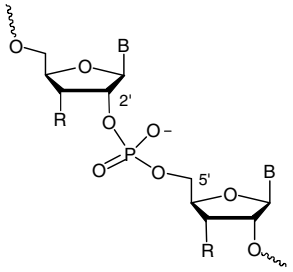


The synthesis and antitrypanosomal activity of analogues related to **7b** (IC_{50} = 0.09 μM) and **8d** (IC_{50} = 0.18 μM) are described.

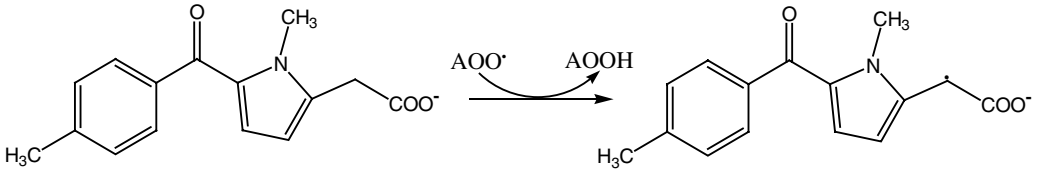


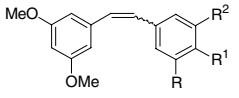
I

A novel series of tetracyclic indoles (**I**) have been designed, synthesized and evaluated as androgen receptor (AR) ligands. Studies of structure–activity relationships (SARs) were investigated, which led to some compounds in this series as strong binders to androgen receptors.



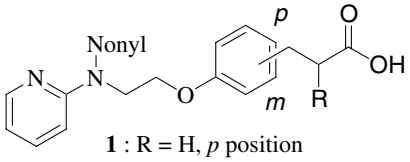
2',5'-DNA: R = H
2',5'-RNA; R = OH



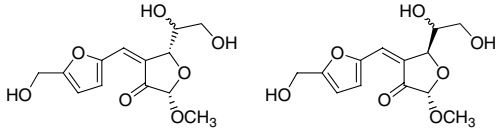


The effects of several stilbenes on HL60 cell cycle have been detected. Particularly interesting is the non-selective phase block caused by a known compound.

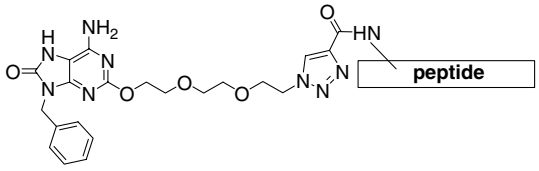
To develop novel PPARα ligands, we designed and synthesized several 3-{3-[2-(nonylpyridin-2-ylamino)ethoxy]phenyl}propanoic acid derivatives which were designed based on the structure of PPARγ agonist **1**. Among these compounds, compounds **10**, **13** and **14** were found to be strong PPARα ligands.



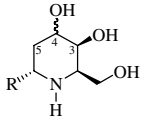
1 : R = H, *p* position
10 : R = H, *m* positon
13 : R = Me, *m* positon
14 : R = Et, *m* positon



Two unique furan derivatives, named phellinusfurans A (**1**) and B (**2**), were isolated from the fruiting body of *Phellinus linteus*, and exhibited significant anti-complement activity in the classical pathway assay.

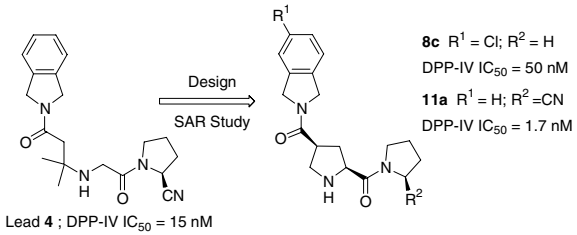


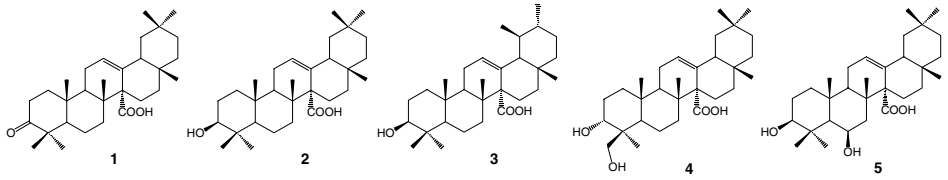
The design, synthesis and immunogenic properties of 2-alkoxy-8-hydroxyadenylpeptides are reported.



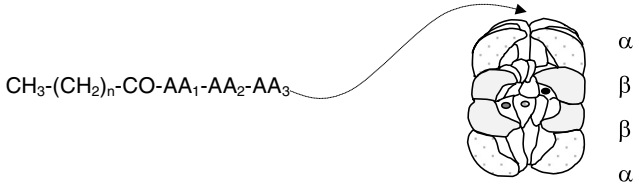
(+/-)-12 3,4-*trans*, R=alkyl
(+/-)-13 3,4-*cis*, R=alkyl

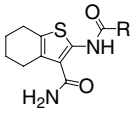
Two series of novel analogues of 5-deoxyadenophorine with lipophilic side-chains (C_2–C_{11}) are prepared and tested on a range of glycosidases.



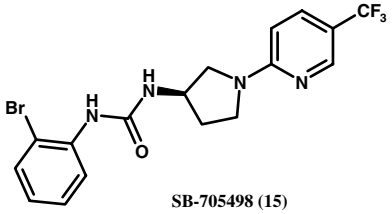


Bioassay-guided fractionation of a MeOH extract of the rhizomes of *Astilbe koreana* led to the isolation of five PTP1B inhibitory triterpenes including a new one, 3α,24-dihydroxyolean-12-en-27-oic acid (**4**).

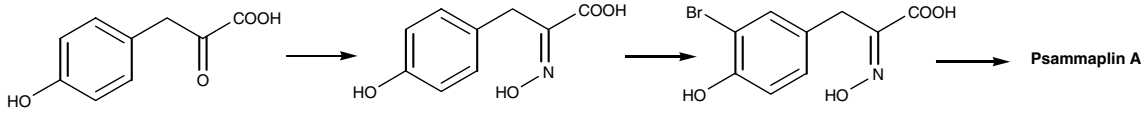


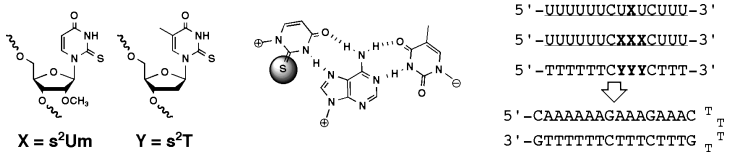


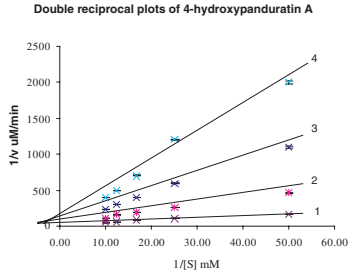
A series of 2-acylaminothiophene-3-carboxamides has been identified which exhibit potent inhibitory activity against the FLT3 tyrosine kinase. Structure–activity relationship studies within this series are described in the context of a proposed binding model within the ATP binding site of the enzyme.



TRPV1 antagonist activity of SB-705498 (**15**) and its in vitro and in vivo activity are reported.







OTHER CONTENTS

*Corresponding author
Supplementary data available via ScienceDirect

COVER

View of the crystal structure of the DB819-d(CGCGAATTCGCG)$_2$ complex, looking down the minor groove of the DNA (see Campbell, N.H.; Evans, D.A.; Lee, M.P.H.; Parkinson, G.N.; Neidle, S. *Bioorg. Med. Chem. Lett.* **2006**, *16*, 15.). The DB819 molecule is shown in space-filling mode. Visualisation produced with the VMD program. [Humphrey, W.; Dalke, A.; Schulten, K. *J. Mol. Graphics* **1996**, *14*, 33.]

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