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Bioorganic & Medicinal Chemistry Letters

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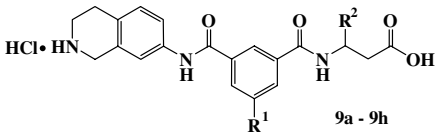
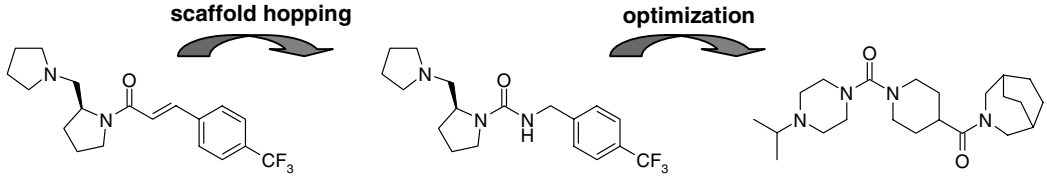


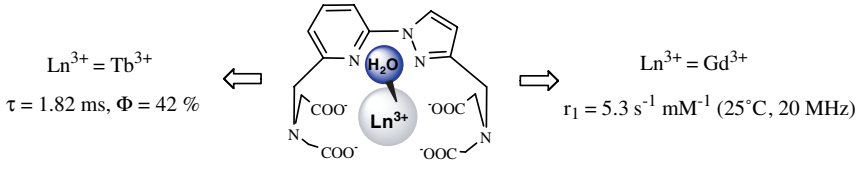
The synthesis of the novel fibrinogen receptor antagonists **9a**–**9h** is reported.

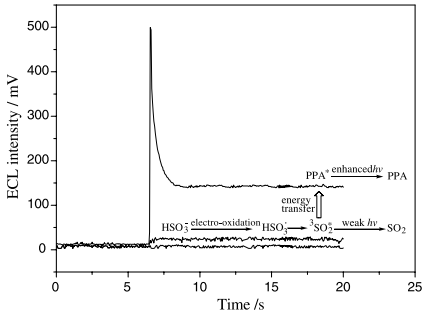


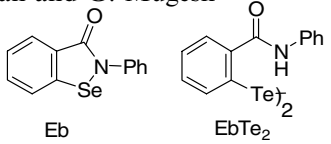
Cinnamic acid amide
NNC 0038-0000-1202
K_i hH$_3$ = 4.7 nM
hERG inhibition = 73%

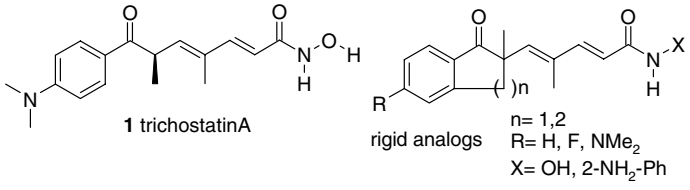
Urea derivative **3a**
K_i hH3 = 162 nM
hERG inhibition = 20%

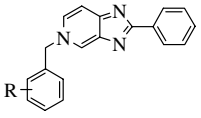
Urea derivative **6i**
K_i hH3 = 14 nM
hERG inhibition = 8%

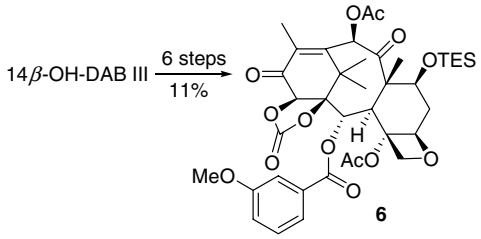




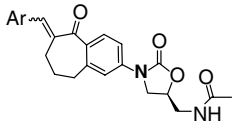




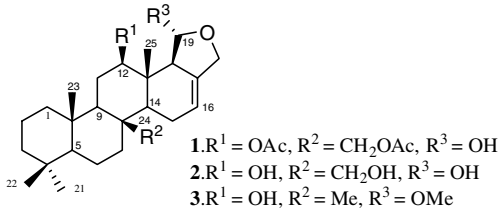




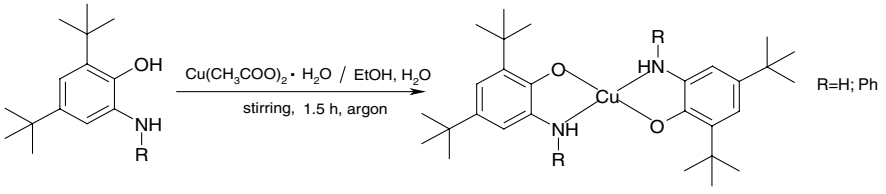
A new, improved synthesis of the 2-debenzoyl-2-*m*-methoxybenzoyl-7-triethylsilyl-13-oxo-14β-hydroxybaccatin III 1,14-carbonate (**6**), the key intermediate in the synthesis of two new second-generation antitumor taxanes, is described.



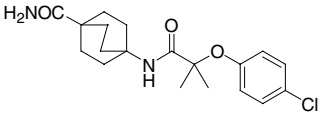
We describe a novel class of benzoheptanone derived oxazolidinone antibacterial agents. The synthesis and antibacterial activities with structure variation are described.



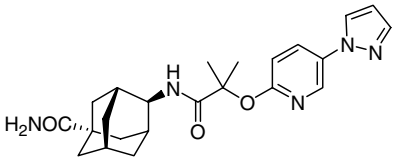
The isolation and structures of three novel scalarane sesterterpenes **1**–**3** and their inhibition of FXR transactivation are reported.



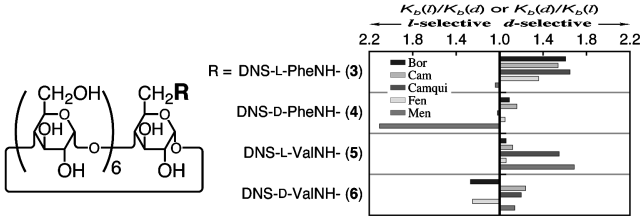
Cu(II) complexes with two sterically hindered *o*-aminophenol derivatives have been synthesized and characterized by means of elemental analysis and various physico-chemical techniques. The antimicrobial activities of compounds were tested.

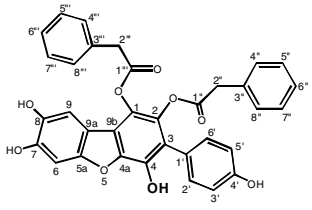


A series of structurally novel and metabolically stable bridged bicyclic carbocycle and heterocycle adamantane replacements have been synthesized and bibiologically evaluated. Several of these compounds exhibit excellent human and mouse 11β-HSD1 potency and 11β-HSD2 selectivity.



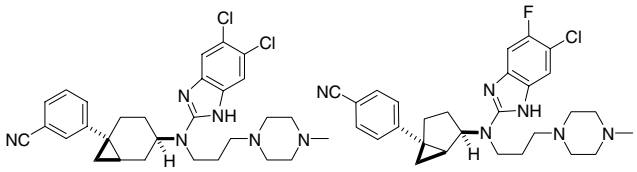
A series of metabolically stable adamantane amide 11β-HSD1 inhibitors have been synthesized and biologically evaluated. These compounds exhibit excellent HSD1 potency and HSD2 selectivity and good pharmacokinetic and pharmacodynamic profiles.





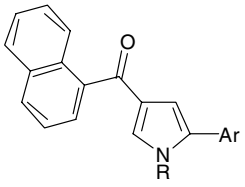
Inhibition of TNF- release	
Sample	**IC_{50} (nM)**
ganbajunin B	5000
vialinin B	0.02
cycloleucomelone	3500

Vialinin B had an IC_{50} value of 0.02 nM, indicating that vialinin B was approximately 2×10^5-fold more effective than the related compounds, ganbajunin B and cycloleucomelone.

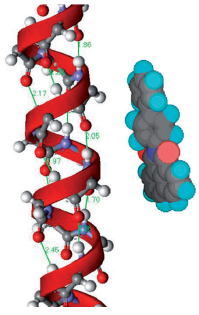


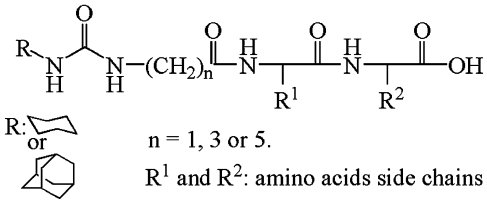
9; h-MCH-R1 K_i = 2.2 nM **22**; h-MCH-R1 K_i = 4.9 nM

A series of potent and highly selective melanin-concentrating hormone (MCH) inhibitors is described.



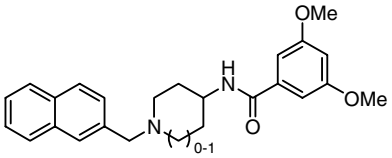
The synthesis and pharmacology of 28 1-alkyl-2-aryl-4-(1-naphthoyl)pyrroles are described. Several of these compounds have high affinity for both the CB_1 and CB_2 receptors.



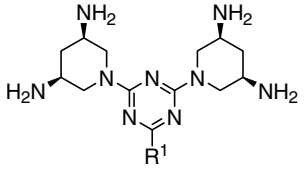


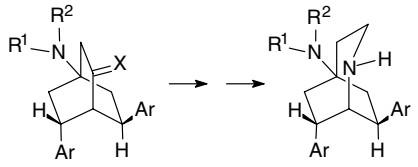
n = 1, 3 or 5.

R^1 and R^2: amino acids side chains



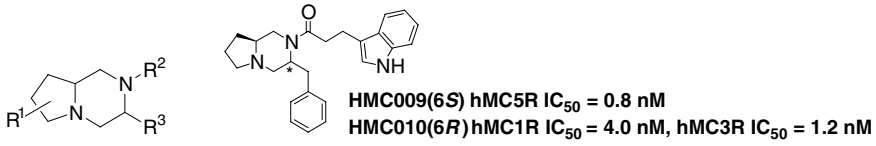
Structure modification of 4-aminopiperidine, an HTS hit, led to the identification of 4-piperidinylbenzamide (**5c**) as a potent MCH antagonist (K_i = 27 nM). Further optimization via piperidine ring contraction resulted in enhanced activity in a 3-aminopyrrolidine series, where 3-pyrrolidinylbenzamide (**10i**) was found to be an excellent MCH antagonist (K_i = 7 nM).



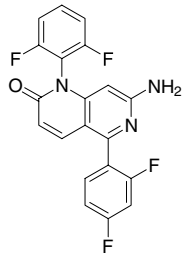


Ar=Ph, 4-Cl-Ph, 4-methoxy-Ph

The in vitro activity of newly synthesized bis-(chlorophenyl)-azabicyclo[3.2.2]nonanes and bis-(chlorophenyl)-bicyclo[2.2.2]octanes against *Plasmodium falciparum* K_1 (resistant to chloroquine and pyrimethamine) and *Trypanosoma brucei rhodesiense* was investigated.



The design, synthesis, and evaluation of new high-affinity antagonists of the human melanocortin receptors (hMCRs) is 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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