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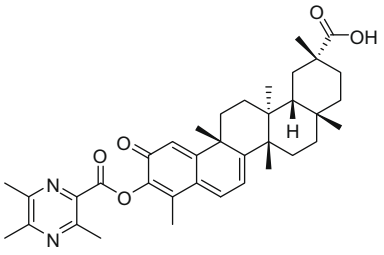
Contents

ARTICLES



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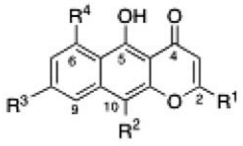
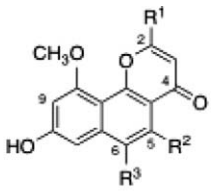
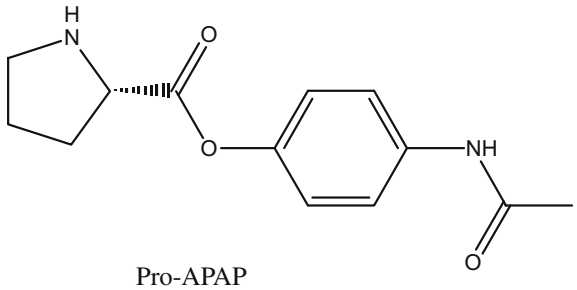


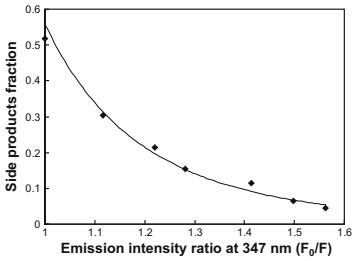
1: R^1=CH_3, R^2=R^3=OCH_3, R^4=OH
2: R^1=$CH_2CH_2CH_3$, R^2=R^3=OCH_3, R^4=OH



3: R^1=CH_3, R^2=OH, R^3=OCH_3
4: R^1=CH_3, R^2=R^3=OCH_3
5: R^1=$CH_2CH_2CH_3$, R^2=OCH_3, R^3=H

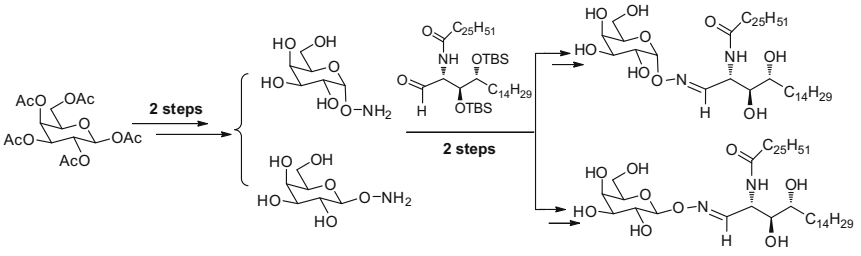


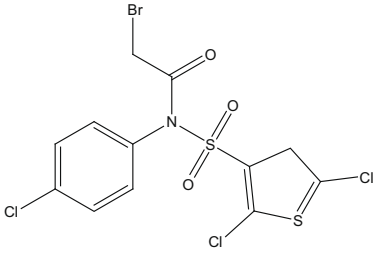
Pro-APAP



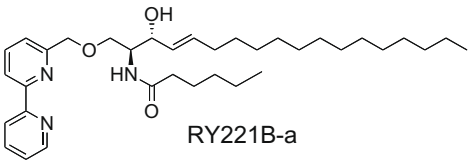
Macromolecular crowding is found to change the structure of the nonribosomal enterobactin synthetase to increase its product specificity.

Glycolipids are potential antigens for iNKT cells recognition and demonstrate important roles in both innate and adaptive immunity. However, the difficulties in the preparation of pure configuration defined glycolipids limit the exploration of their different profiles in activating iNKT cells. We report here a concise and stereospecific preparation of novel galactosylceramide analogues by oxime ligation. This strategy would provide an efficient way to generate varied glycolipid analogues with either synthetic or natural carbohydrates for biological evaluations.

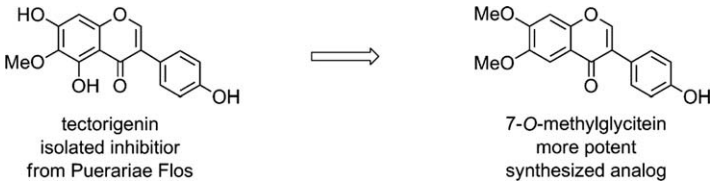




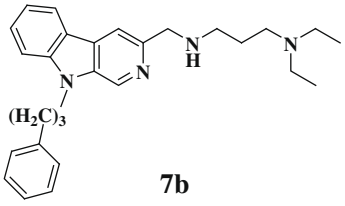
Various substituted thiophene and benzyl sulfonamides were identified as inhibitors of the plasmodial CDK, Pfmrk. Bromohydrosulfonylacetamides were selective for Pfmrk over human CDKs.



Neutral Sphingomyelinase Inhibitor (IC_{50} = 1.2 μM)

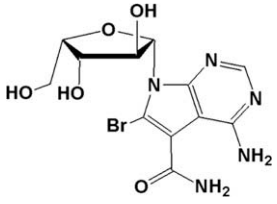


Tectorigenin was disclosed as the inhibitor for expression of IgE receptor on human mast cells from the medicinal plant, Puerariae Flos. Furthermore, survey for synthesized analogs brought about more potent 7-*O*-methyl glycitein.

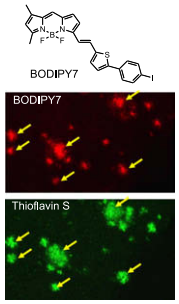


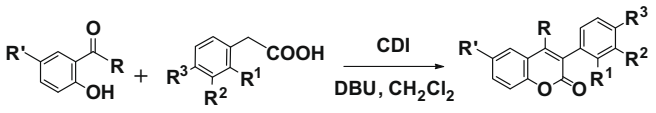
7b

A series of water-soluble β-carbolines, bearing a flexible amino side chain, has been prepared and evaluated in vitro against a panel of human cell lines. Compound **7b** were found to be the most potent compound with IC_{50} values lower than 10 μM against eight human tumor cell lines.

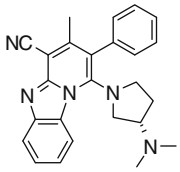


The chemical structure of MCS-5A 4-amino-6-bromo-7-(β-L-xylofuranosyl)pyrrolo[2,3-*d*]pyrimidine-5-carboxamide.

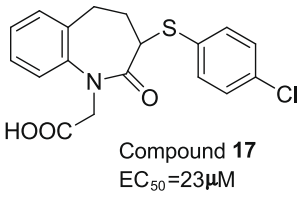




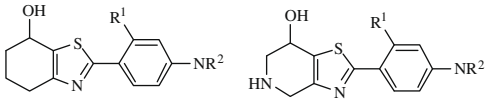
Novel 3-aryl-coumarin derivatives have been synthesized via a new methodology. The in vitro antioxidant and soybean lipoxygenase inhibitory activity of the new compounds has been evaluated.



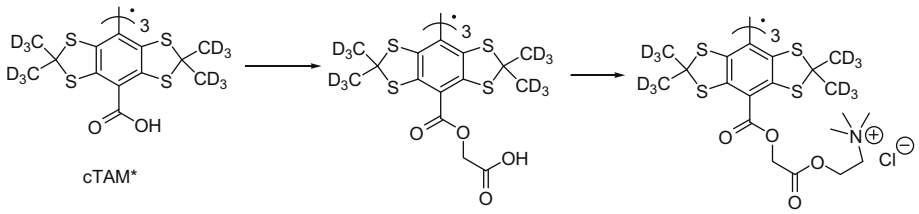
We have discovered novel pyridobenzimidazole derivatives, which exhibit antifungal activity by the inhibition of β-1,6-glucan synthesis.



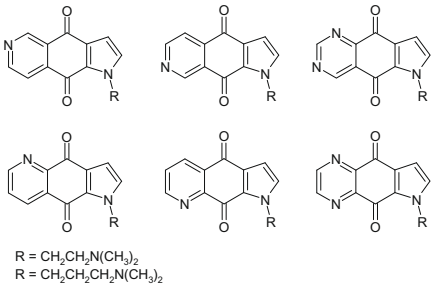
Design, synthesis and SARs of novel series of 2-thio-benzoazepin-2-one analogs as allosteric activators of PDK1 targeting the PIF pocket are reported.

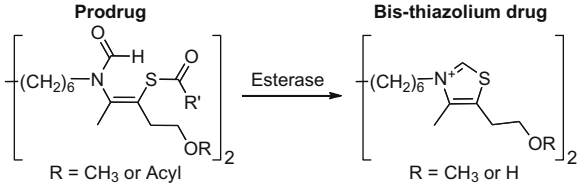


A series of 2-(4-aminophenyl)-4,5,6,7-tetrahydro-1,3-benzothiazol-7-ols and their 5-aza analogs, 2-(4-aminophenyl)-4,5,6,7-tetrahydro[1,3]thiazolo[4,5-*c*]pyridin-7-ols, demonstrated high levels of selectivity against aneuploid cell growth (vs diploid cells).

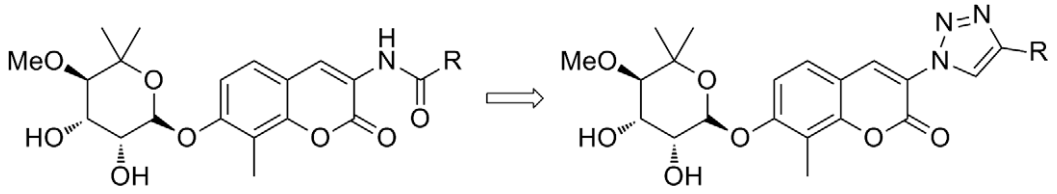


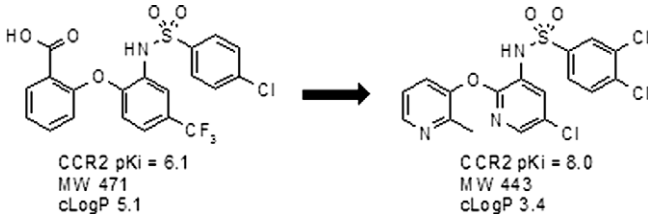
Substituted trityl radicals are important spin probes for functional electron paramagnetic resonance spectroscopy and imaging including oxygen and pH mapping in vivo. Here we report an efficient synthetic procedure for the synthesis of deuterated Finland trityl radical, cTAM*, and its derivatives. The effect of deutero-substitution on EPR spectra of homologous derivatives has been evaluated. The compounds are potential candidates for targeted spin probes in EPR imaging and spectroscopy.

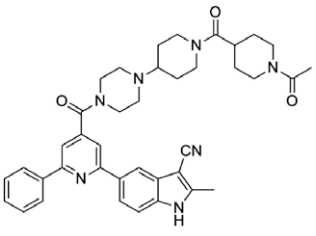


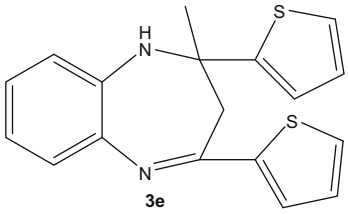


The synthesis and biological activities of a series of bis-thiazolium prodrugs are reported.

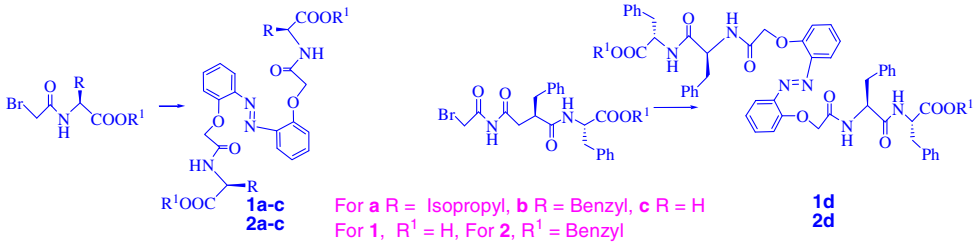








1,5-Benzodiazepine derivatives such as compound **3e** showed a good anti-neuroinflammatory effects by suppressing iNOS enzyme activity in microglia cells.



The compounds (**1** and **2**) showed inhibition of SKI-1 in micromolar concentrations.

3'-AgAgTgCgCpC-5' (I)
3'-AgAgTgCgCgCgAgAgTgCgCpC-5' (II)
DNG linkage; NgN

Oligonucleotides containing positively charged ribonucleic guanidine linkages (DNG I, II) have been synthesized to develop anticancer agents targeting telomere. Binding properties of DNG I, II are presented.

*Corresponding author
ⓘ+ Supplementary data available via ScienceDirect

COVER

Overlay of high resolution co-crystal structures of *R*-**22**-ADP (cyan) and **1**-ADP (green) bound in an allosteric binding site of the mitotic kinesin KSP. [Roecker, A. J.; Coleman, P. J.; Mercer, S. P.; Schreier, J. D.; Buser, C. A.; Walsh, E. S.; Hamilton, K.; Lobell, R. B.; Tao, W.; Diehl, R. E.; South, V. J.; Davide, J. P.; Kohl, N. E.; Yan, Y.; Kuo, L. C.; Li, C.; Fernandez-Metzler, C.; Mahan, E. A.; Prueksaritanont, T.; Hartman, G. D. *Bioorg. Med. Chem. Lett.* **2007**, *17*, 5677.]

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