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Preliminary Communication

Influence of an additional amino group on the potency of aminoadamantanes against influenza virus A. II – Synthesis of spiropiperazines and *in vitro* activity against influenza A H3N2 virus

pp 247-251

Christos Fytas, Antonios Kolocouris, George Fytas,* Grigoris Zoidis, Charalampos Valmas and Christopher F. Basler

We identified the diamino derivative **5** which has a significant activity against influenza A H3N2 virus although less potent than amantadine **1** and its equipotent spiropiperidine **4**.

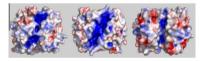
Regular Articles

Kinetic and structural characterization of Dmpl from *Helicobacter pylori* and *Archaeoglobus* fulgidus, two 4-oxalocrotonate tautomerase family members

pp 252-259

Jeffrey J. Almrud, Rakhi Dasgupta, Robert M. Czerwinski, Andrew D. Kern, Marvin L. Hackert* and Christian P. Whitman**

The electrostatic surface potentials of HpDmpI, 4-oxalocrotonate tautomerase (4-OT), and AfDmpI, respectively, from left to right. HpDmpI lacks electropositive character at one end of the proposed active site. 4-OT shows strong electropositive character at each end of the active site. AfDmpI lacks strong positive or negative electrostatic character.



$\beta\text{-1,3-Glucan/antisense}$ oligonucleotide complex stabilized with phosphorothioation and its gene suppression

pp 260-264

Shinichi Mochizuki and Kazuo Sakaurai*

Complexation between oligo dA with PS and SPG. This hetero triple-stranded complex is formed from one DNA strand and two SPG strand.

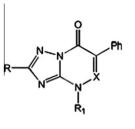
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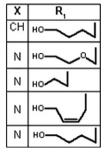
1,2,4-Triazoloazine derivatives as a new type of herpes simplex virus inhibitors

pp 265-270

S.L. Deev, M.V. Yasko, I.L. Karpenko, A.N. Korovina, A.L. Khandazhinskaya, V.L. Andronova, G.A. Galegov, T.S. Shestakova, E.N. Ulomskii, V.L. Rusinov, O.N. Chupakhin and M.K. Kukhanova*

Structure of synthesized compounds.





R: a = H; b = Me; c = SMe.

Rapid synthesis of 2',3'-dideoxy- $3'\beta$ -fluoro-pyrimidine nucleosides from 2'-deoxypyrimidine nucleosides

pp 271-274

Ahmed Khalil, Christophe Mathé* and Christian Périgaud

A rapid synthesis of 2',3'-dideoxy-3'-fluoro-beta-D-threo-nucleosides bearing the pyrimidine canonical bases of nucleic acids has been developed in order to discover new nucleoside derivatives as potential antiviral.

Synthesis of the natural enantiomer of neplanocin B

pp 275-278

Nadège Hamon, Jean-Pierre Uttaro, Christophe Mathé* and Christian Périgaud

(–)-Neplanocin B, the natural isomer of a component of the neplanocin family was diasteroselectively synthesized from 2,3-O-isopropylidene-D-1,4-ribonolactone.

(-)-Neplanocin B

Efficient synthesis of 16 aromatic Morita-Baylis-Hillman adducts: Biological evaluation on Leishmania amazonensis and Leishmania chagasi

pp 279-284

Cláudio G.L. Junior, Priscila A.C. de Assis, Fábio P.L. Silva, Suervy C.O. Sousa, Natália G. de Andrade, Ticiano P. Barbosa, Patrícia L.N. Nerís, Luiz V.G. Segundo, Ítalo C. Anjos, Gabriel A.U. Carvalho, Gerd B. Rocha, Márcia R. Oliveira* and Mário L.A.A. Vasconcellos**

We described "one-pot" Morita-Baylis-Hillman reactions to produced 16 aromatic compounds (81-100%), its bio-evaluations on *L. Amazonensis* and *L. chagasi* and a relationship between the chemical structure and biological activity (S.A.R.).

X=o-NO₂,m-NO₂,p-NO₂, p-Br Y=2-N, 3-N, 4-N Z=CN or CO₂CH₃. X=H; Y=CH; 6.88 µg 16 examples Z=CN, 32.88 µf (81-100% yields) W=CH

6.88 μg/mL⁻¹ 11.06 μg/mL⁻¹ 32.88 μM 52.92 μM titime >8mg/mL⁻¹ >8mg/mL⁻¹

Synthesis of 3-fluoro-6-S-(2-S-pyridyl) nucleosides as potential lead cytostatic agents

pp 285-293

Evangelia Tsoukala, Niki Tzioumaki, Stella Manta, Alexandra Riga, Jan Balzarini and Dimitri Komiotis*

The synthesis of a new series of 2-S-pyridyl-6-thionucleosides, bearing natural and modified purines and pyrimidines, by developing highly efficient synthetic routes, is reported. Compound **7c**, and in particular **7b**, were endowed with significant and selective cytostatic activity and can be regarded as novel lead compounds for further modifications.

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