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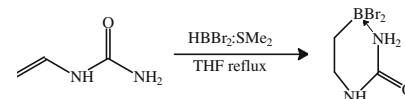
Preliminary Communication

Synthesis and NMR properties of novel 5,6-dihydroboraauracil derivatives

pp 65–69

Tomasz Ruman, * Karolina Długopolska, Anna Kuśnierz, Agata Jurkiewicz, Andrzej Leś and Wojciech Rode

Novel boron compounds a 5,6-saturated boraauracil derivatives (4-bromo-5,6-dihydro-boraauracil, 4-hydroxy-5,6-dihydro-boraauracil and 4-methoxy-5,6-dihydroboraauracil) are presented along with other boron compounds obtained from *N*-vinylurea: *N*-substituted β -boronic amino acid – 2-[(dihydroxyborano-amino)(dihydroxyborano-oxy)methyl]-amino)ethylboronic acid and substituted methoxy-borane *O*-[(1-amino-1-*N*-vinylamino)-methyl]dihydroxyboronate.



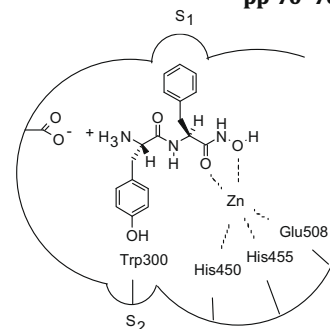
Regular Articles

Absolutely conserved tryptophan in M49 family of peptidases contributes to catalysis and binding of competitive inhibitors

pp 70–76

Jasminka Špoljarić, Branka Salopek-Sondi, Janja Makarević, Bojana Vukelić, Dejan Agić, Šumski Šimaga, Nina Jajčanin-Jozić and Marija Abramić *

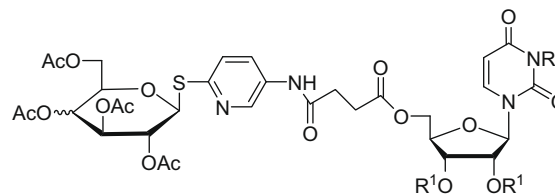
Binding of a competitive inhibitor Tyr-Phe-NHOH to the active site of human DPP III.



5-Amino-2-pyridyl 1-thioglycosides in synthesis of analogs of glycosyltransferases substrates

pp 77–83

Gabriela Pastuch-Gawolek, * Tadeusz Bieg, Wiesław Szeja and Jakub Flasz

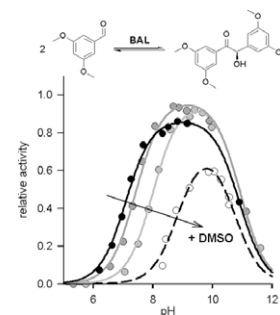


R = H or Bz
R¹ = -CMe₂- or TBDMS

Biochemical peculiarities of benzaldehyde lyase from *Pseudomonas fluorescens* Biovar I in the dependency on pH and cosolvent concentration

pp 84–89

T. Schmidt, M. Zavrel, A. Spieß and M.B. Ansorge-Schumacher *

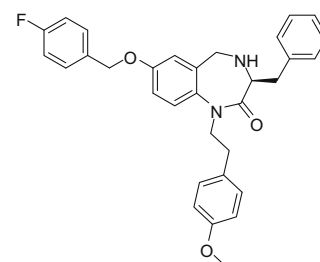


Combinatorial synthesis and biological evaluation of peptide-binding GPCR-targeted library

pp 90–95

Ju Yeon Lee, Isak Im, Thomas R. Webb, Douglas McGrath, Mi-Ryoung Song and Yong-Chul Kim *

A series of benzodiazepine compound library designed as a beta-turn peptidomimetics have been synthesized and evaluated with a cell based screening at melanocortin 4 receptor, resulting in the generation of hit compounds having agonistic activities.

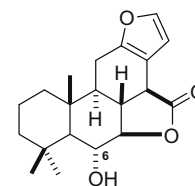
EC₅₀ = 13.0 μM

Effect of 6 α ,7 β -dihydroxyvouacapan-17 β -oic acid and its lactone derivatives on the growth of human cancer cells

pp 96–100

Felipe P.G. Euzébio, Flávio J.L. dos Santos, Dorila Piló-Veloso, Ana Lúcia T.G. Ruiz, João Ernesto de Carvalho, Dalton L. Ferreira-Alves and Ângelo de Fátima *

Here, we describe the antiproliferative activity of four furanditerpenes against nine human cancer cell lines. Our results revealed that 6 α -hydroxyvouacapan-7 β ,17 β -lactone (**2**) was the most potent furanditerpene against all cancer cell lines studied. The presence of a non-substituted hydroxyl group at C-6 and the presence of 7 β ,17 β -lactone ring are important for the antiproliferative activity of these compounds.

6 α -hydroxyvouacapan-7 β ,17 β -lactone (**2**)