

RSC Medicinal Chemistry

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IN THIS ISSUE

ISSN 2632-8682 CODEN RMCSCX 14(10) 1829-2116 (2023)



Cover

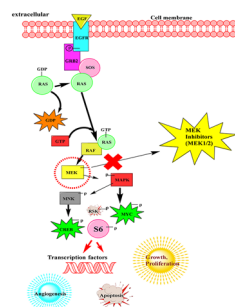
See Hirokazu Tamamura *et al.*, pp. 1973–1980.
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REVIEWS

1837

MEK inhibitors in cancer treatment: structural insights, regulation, recent advances and future perspectives

Teja Ram, Ankit Kumar Singh, Adarsh Kumar, Harshwardhan Singh, Prateek Pathak, Maria Grishina, Habibullah Khalilullah, Mariusz Jaremkowski, Abdul-Hamid Emwas, Amita Verma and Pradeep Kumar*

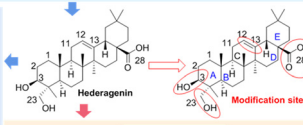


1858

Pharmacological overview of hederagenin and its derivatives

Xing Huang, Qing-Kun Shen, Hong-Yan Guo, Xiaoting Li* and Zhe-Shan Quan*

Sources			
<i>Hedera helix</i> L.	<i>Paeonia lactiflora</i>	<i>Astrantia major</i>	<i>Campsis grandiflora</i>
<i>Patrinia scabiosifolia</i> I.	<i>Cussonia bancoensis</i>	<i>Klainedoxa gabonensis</i>

Pharmacokinetics	Chemical Structure	Pharmacology
280 mg/kg		
Peak concentration = 47.73 ng/mL		Anti-tumor
T _{max} = 18.33 min		Neuroprotective
t _{1/2} = 44.06 min		Anti-inflammatory
Ke = 0.016 min		Anti-depressant
		Anti-bacterial
		Anti-parasitic
		Anti-fungal
		Anti-diabetic
		Antiatherosclerosis



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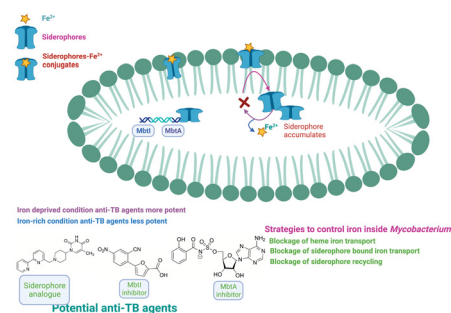


REVIEWS

1885

Targeting *Mycobacterium tuberculosis* iron-scavenging tools: a recent update on siderophores inhibitors

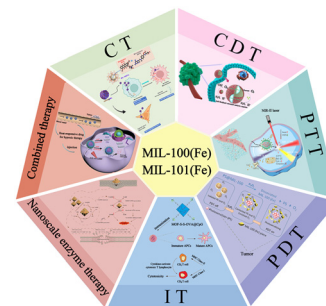
Gautam Kumar* and Patil Amruta Adhikrao



1914

Current status and prospects of MIL-based MOF materials for biomedicine applications

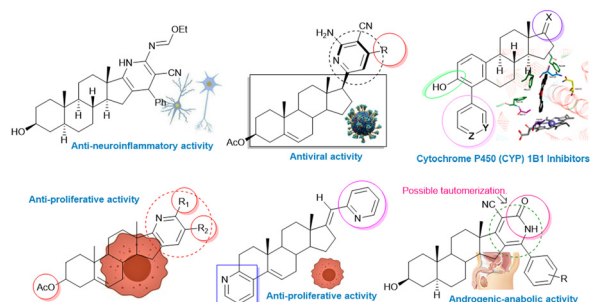
Zengqin Lin, Donghui Liao, Chenyi Jiang, Alireza Nezamzadeh-Ejhieh, Minbin Zheng, Hui Yuan,* Jianqiang Liu, Hailiang Song* and Chengyu Lu*



1934

Synthesis, biological activities, and future perspectives of steroidal monocyclic pyridines

Mohamed M. Hammouda, Khaled M. Elattar,* Marwa M. Rashed and Amany M. A. Osman

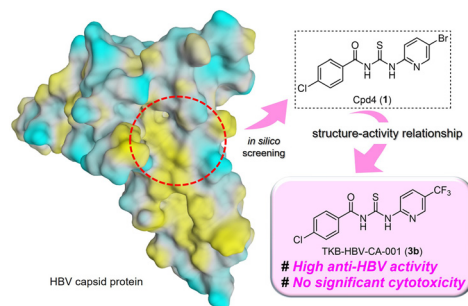


RESEARCH ARTICLES

1973

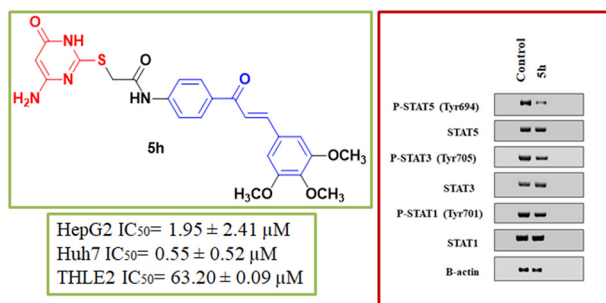
Development of anti-HBV agents targeting HBV capsid proteins

Takuya Kobayakawa, Masayuki Amano, Miyuki Nakayama, Kohei Tsuji, Takahiro Ishii, Yutaro Miura, Kouki Shinohara, Kenichi Yamamoto, Masao Matsuoka and Hirokazu Tamamura*



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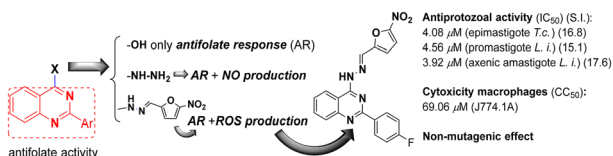
1981



Design, synthesis, and anti-hepatocellular carcinoma of thiopyrimidine/chalcone hybrids as dual STAT3/STAT5 inhibitors

Najla Altwaijry, Rehab Sabour, Mona H. Ibrahim, Omkulthom Al kamaly, Omeima Abdullah and Marwa F. Harras*

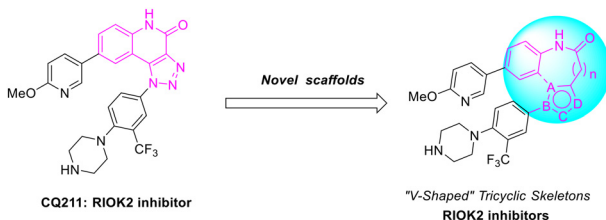
1992



Optimization of the 2-arylquinazoline-4(3H)-one scaffold for a selective and potent antitrypanosomal agent: modulation of the mechanism of action through chemical functionalization

Angel H. Romero,* Elena Aguilera, Lourdes Gotopo, Gustavo Cabrera, Belén Dávila and Hugo Cerecetto

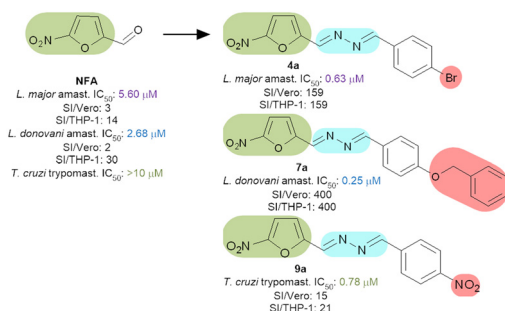
2007



Exploration of tricyclic heterocycles as core structures for RIOK2 inhibitors

Huilan Xiong, Qiuchun Yu, Haowen Ma, Xiuwen Yu, Yifan Ouyang, Zhi-Min Zhang, Wei Zhou,* Zhang Zhang* and Qian Cai*

2012



Design, synthesis, electrochemistry and anti-trypanosomatid hit/lead identification of nitrofuranylazines

Maryna Saayman, Christina Kannigadu, Janine Aucamp, Helena D. Janse van Rensburg, Cassiem Joseph, Andrew J. Swarts and David D. N'Da*

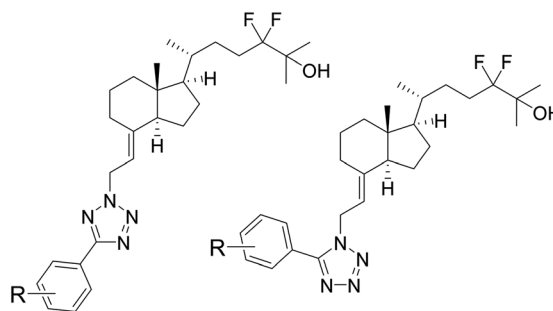


RESEARCH ARTICLES

2030

Structure–activity relationship studies on vitamin D-based selective SREBP/SCAP inhibitor KK-052

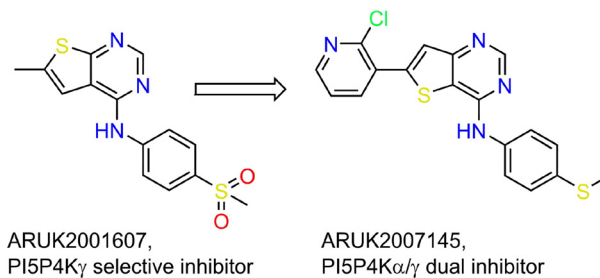
Fumihiro Kawagoe, Sayuri Mototani, Aileen Mendoza, Yasushi Takemoto, Motonari Uesugi and Atsushi Kittaka*



2035

The rational design of ARUK2007145, a dual inhibitor of the α and γ isoforms of the lipid kinase phosphatidylinositol 5-phosphate 4-kinase (PI5P4K)

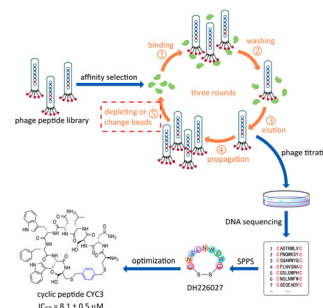
Gregory G. Aldred, Timothy P. C. Rooney, Henriette M. G. Willems, Helen K. Boffey, Christopher Green, David Winpenny, John Skidmore, Jonathan H. Clarke and Stephen P. Andrews*



2048

Screening and optimization of phage display cyclic peptides against the WDR5 WBM site

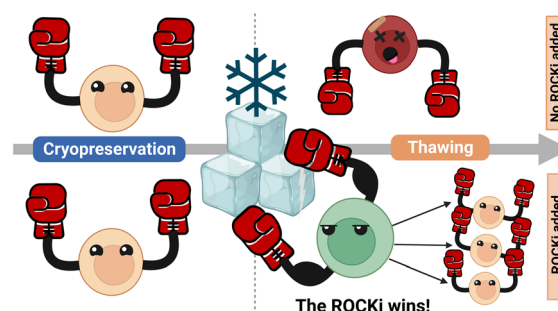
Lingyu Song, Jiawen Cao, Lin Chen, Zhiyan Du, Naixia Zhang, Danyan Cao* and Bing Xiong*



2058

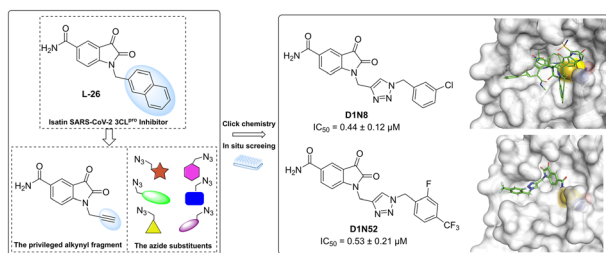
Post-thaw application of ROCK-inhibitors increases cryopreserved T-cell yield

Natalia Gonzalez-Martinez and Matthew I. Gibson*



RESEARCH ARTICLES

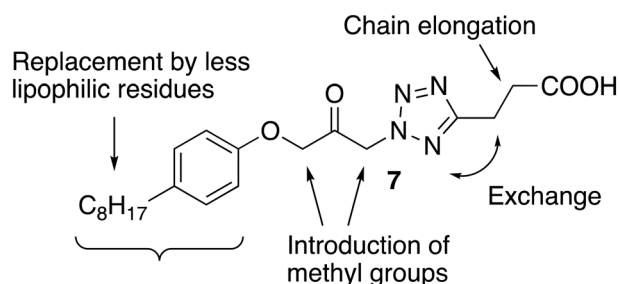
2068



Identification of novel 1,2,3-triazole isatin derivatives as potent SARS-CoV-2 3CLpro inhibitors via click-chemistry-based rapid screening

Xiangyi Jiang, Jing Li, Antonio Viayna, F. Javier Luque, Molly Woodson, Lanlan Jing, Shenghua Gao, Fabao Zhao, Minghui Xie, Karoly Toth, John Tavis, Ann E. Tollefson,* Xinyong Liu* and Peng Zhan*

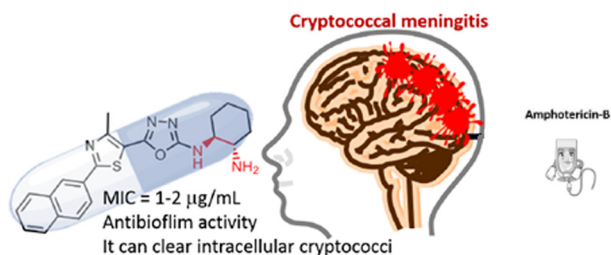
2079



Synthesis, activity and metabolic stability of propan-2-one substituted tetrazolylalkanoic acids as dual inhibitors of cytosolic phospholipase A₂α and fatty acid amide hydrolase

Merlin Ekodo Voundi, Walburga Hanekamp and Matthias Lehr*

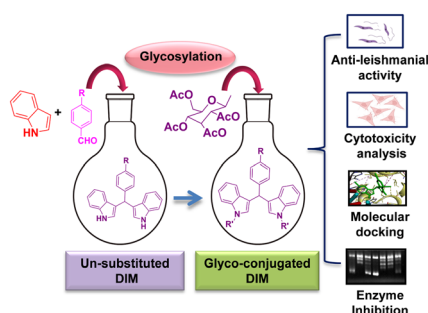
2089



Naphthylthiazoles: a class of broad-spectrum antifungals

Mohamed Hagra, * Nader S. Abutaleb, Hany G. Ezzat, Ehab A. Salama, Mohamed N. Seleem and Abdelrahman S. Mayhoub*

2100



Design, synthesis, and biological evaluation of 3,3'-diindolylmethane *N*-linked glycoconjugate as a leishmanial topoisomerase IB inhibitor with reduced cytotoxicity

Parampreet Kour, Pallavi Saha, Srija Bhattacharya, Diksha Kumari, Abhipsa Debnath, Amit Roy, Deepak K. Sharma, Debaraj Mukherjee* and Kuljit Singh*

