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ISSN 2632–8682 CODEN RMCSCX 15(6) 1785–2200 (2024)

Cover
See Danijela Maksimović-Ivanić, Evamarie Hey-Hawkins *et al.*, pp. 1921–1928.
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EDITORIAL

1796

Introduction to the themed collection on 'Targeting RNA with small molecules'

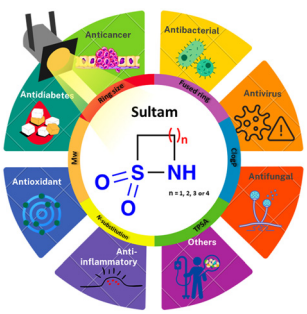
Ruth Brenk, Peng Wu and Maria Duca*

REVIEWS

1798

Unveiling sultam in drug discovery: spotlight on the underexplored scaffold

Yie Kie Chong, Yee Swen Ong and Keng Yoon Yeong*



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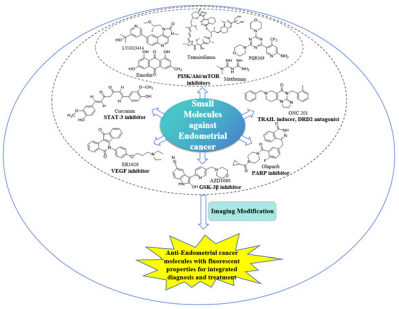
REVIEWS

1828

Small molecule targeted therapies for endometrial cancer: progress, challenges, and opportunities

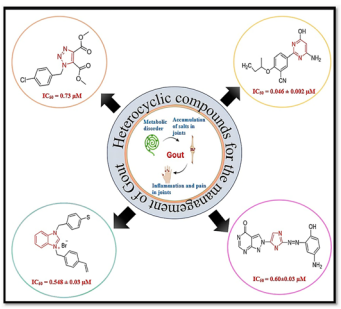
Fei-Fei Yang, Tian-Tian Zhao, Slieman Milaneh, Chun Zhang, Da-Jun Xiang* and Wen-Long Wang*



1849

Heterocyclic compounds as xanthine oxidase inhibitors for the management of hyperuricemia: synthetic strategies, structure–activity relationship and molecular docking studies (2018–2024)

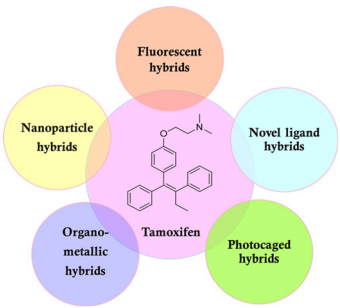
Arshdeep Singh, Rabin Debnath, Viney Chawla and Pooja A. Chawla*



1877

Potential of covalently linked tamoxifen hybrids for cancer treatment: recent update

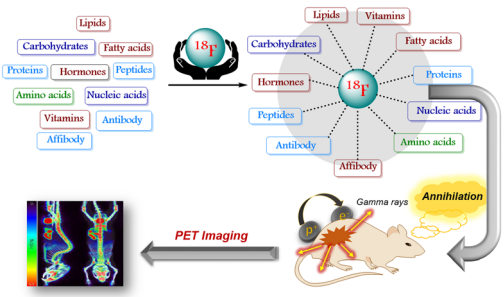
Shagufta,* Irshad Ahmad, Donna J. Nelson, Maheen Imtiaz Hussain and Noora Ali Nasar



1899

Synthetic ^{18}F labeled biomolecules that are selective and promising for PET imaging: major advances and applications

Manisha Lamba, Prasoon Raj Singh, Anupam Bandyopadhyay* and Avijit Goswami*



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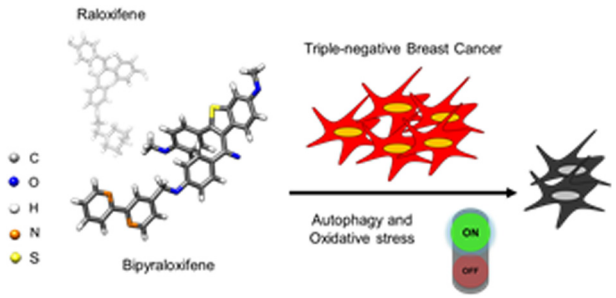
RESEARCH ARTICLES

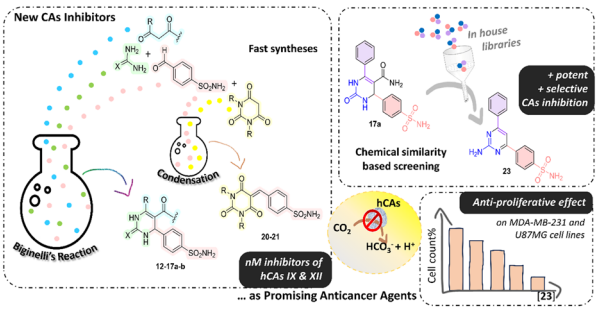
1921



Bipyraloxifene – a modified raloxifene vector against triple-negative breast cancer

Aleksandr Kazimir, Tom Götze, Blagoje Murganić, Sanja Mijatović, Danijela Maksimović-Ivanić* and Evamarie Hey-Hawkins*

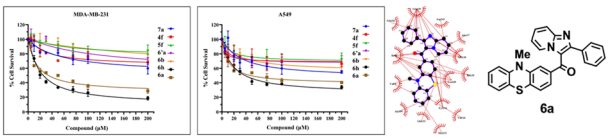
1929



Benzenesulfonamide decorated dihydropyrimidin(thi)ones: carbonic anhydrase profiling and antiproliferative activity

Hakan Aslan,* Gioele Renzi, Andrea Angeli, Ilaria D'Agostino,* Roberto Ronca, Maria Luisa Massardi, Camilla Tavani, Simone Carradori, Marta Ferraroni, Paolo Governa, Fabrizio Manetti, Fabrizio Carta* and Claudiu T. Supuran

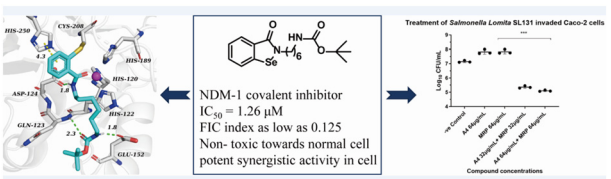
1942



Design, synthesis, molecular docking and anti-proliferative activity of novel phenothiazine containing imidazo[1,2-*a*]pyridine derivatives against MARK4 protein

Avijit Bhakta, Sayeed Mukhtar, Saleha Anwar, Shaista Haider, Mohammed Issa Alahmdi, Humaira Parveen, Meshari A. Alsharif, Mohmmad Younus Wani, Anindita Chakrabarty, Md. Imtaiyaz Hassan and Naseem Ahmed*

1959



Design, synthesis and antibacterial activity evaluation of ebselen derivatives in NDM-1 producing bacteria

Wanli Meng, Chenyu Liu, Guangxin Wu, Zhongyue Bai, Zhihao Wang, Sheng Chen, Shengbiao Wan* and Wandong Liu*

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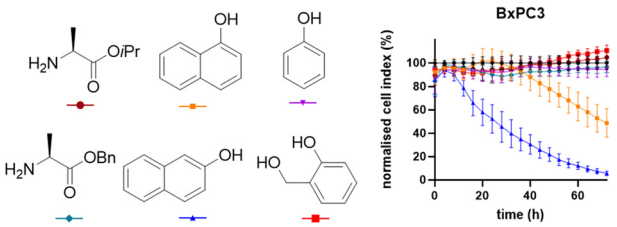
1973

Cytotoxicity of phosphoramidate, bis-amidate and cycloSal prodrug metabolites against tumour and normal cells

Rebecca E. Farrell, Harrison Steele, Ryan J. Middleton, Danielle Skropeta* and Guo-Jun Liu*

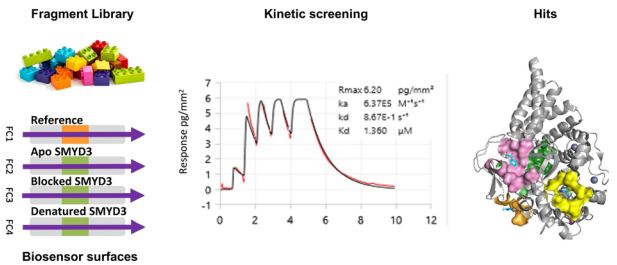


Prodrug metabolite toxicity evaluation

1982

Identification of fragments targeting SMYD3 using highly sensitive kinetic and multiplexed biosensor-based screening

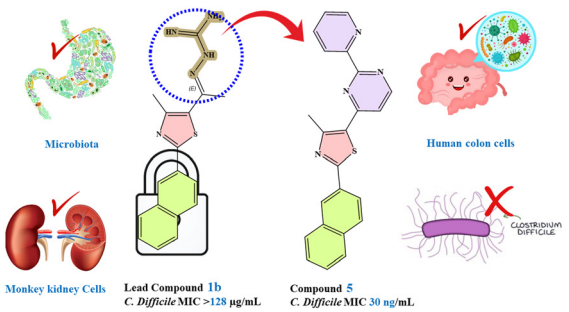
Edward A. FitzGerald, Daniela Cederfelt, Bjarte Aarmo Lund, Nadine E. M. Myers, He Zhang, Doreen Dobritzsch and U. Helena Danielson*



1991

Phenylthiazoles with potent & optimum selectivity toward *Clostridium difficile*

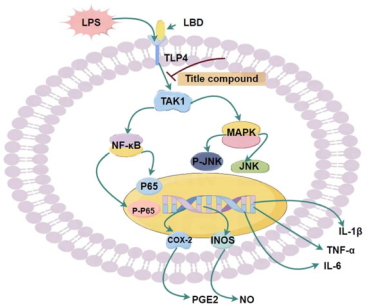
Mahmoud M. Seif El-Din, Mohamed Hagras* and Abdelrahman S. Mayhoub*



2002

Identification of chalcone analogues as anti-inflammatory agents through the regulation of NF-κB and JNK activation

Die Zhang, Wenping Wang, Huiping Ou, Jinhua Ning, Yingxun Zhou, Jin Ke, Anguo Hou, Linyun Chen, Peng Li,* Yunshu Ma* and Wen Bin Jin*



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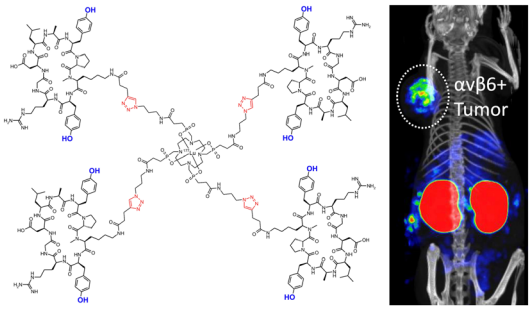
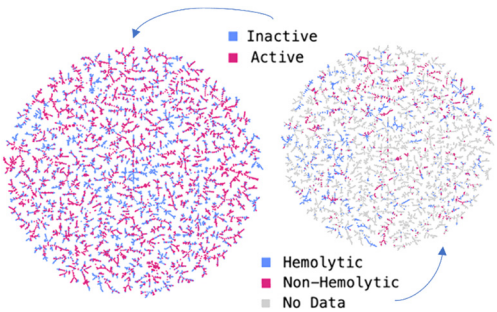
2018



The importance of tyrosines in multimers of cyclic RGD nonapeptides: towards αvβ6-integrin targeted radiotherapeutics

Neil Gerard Quigley, Maximilian Alexander Zierke, Beatrice Stefanie Ludwig, Frauke Richter, Nghia Trong Nguyen, Falco Reissig, Jakub Šimeček, Susanne Kossatz* and Johannes Notni*

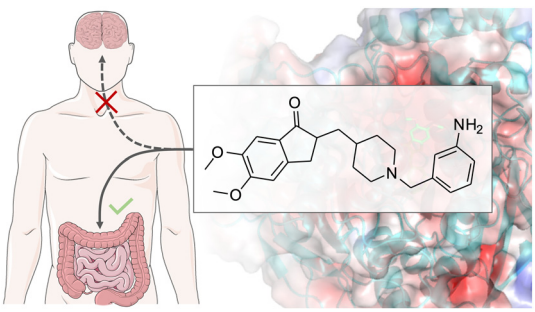
2030



Can large language models predict antimicrobial peptide activity and toxicity?

Markus Orsi and Jean-Louis Reymond*

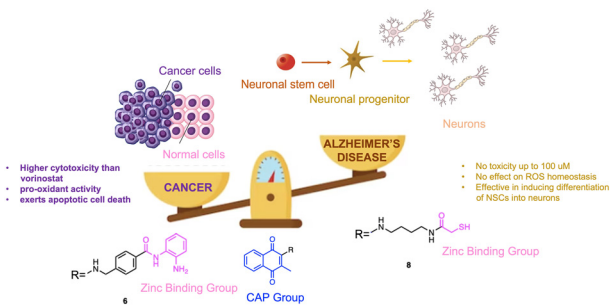
2037



Amine-containing donepezil analogues as potent acetylcholinesterase inhibitors with increased polarity

Jonas Kaltbeitzel, Christian Kersten and Peter R. Wich*

2045



Integrating a quinone substructure into histone deacetylase inhibitors to cope with Alzheimer's disease and cancer

Melissa Guardigni, Giulia Greco, Eleonora Poeta, Alan Santini, Elisa Tassinari, Christian Bergamini, Chiara Zalambani, Angela De Simone, Vincenza Andrisano, Elisa Uliassi, Barbara Monti, Maria Laura Bolognesi,* Carmela Fimognari and Andrea Milelli*

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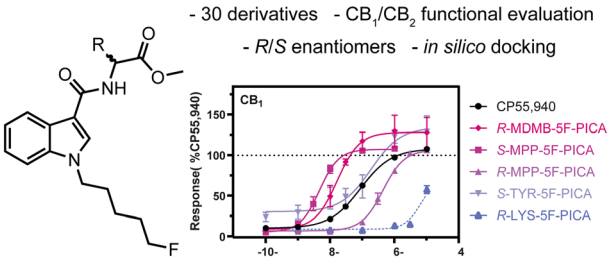
2063

Synthesis and functional evaluation of proteinogenic amino acid-derived synthetic cannabinoid receptor agonists related to MPP-5F-PICA, MMB-5F-PICA, and MDMB-5F-PICA

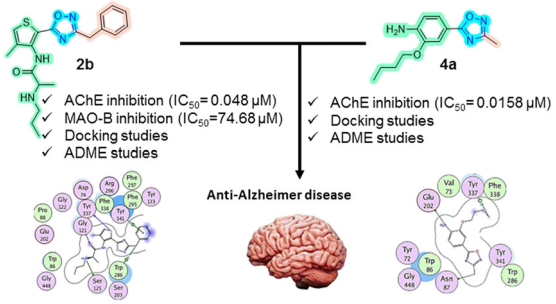
Eric Sparkes, Jack W. Markham, Rochelle Boyd, Michael Udoh, Rebecca Gordon, Humayra Zaman, Katelyn A. Walker, Chianna Dane, Richard C. Kevin, Marina J. Santiago, David E. Hibbs, Samuel D. Banister, Adam Ametovski and Elizabeth A. Cairns*



2080

Design, synthesis, and biological evaluation of 1,2,4-oxadiazole-based derivatives as multitarget anti-Alzheimer agents

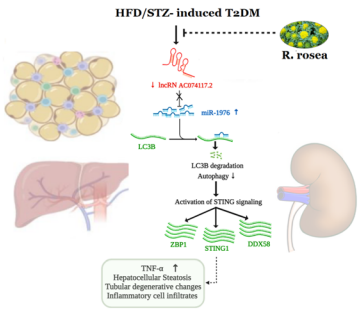
Mohammed Salah Ayoup,* Mohamed Reda Barakat, Hamida Abdel-Hamid, Ehab Emam, Yasair S. Al-Faiyz, Aliaa A. Masoud, Doaa A. Ghareeb, Amr Sonousi and Asmaa E. Kassab*



2098

Rosavin improves insulin resistance and alleviates hepatic and kidney damage *via* modulating the cGAS-STING pathway and autophagy signaling in HFD/STZ-induced T2DM animals

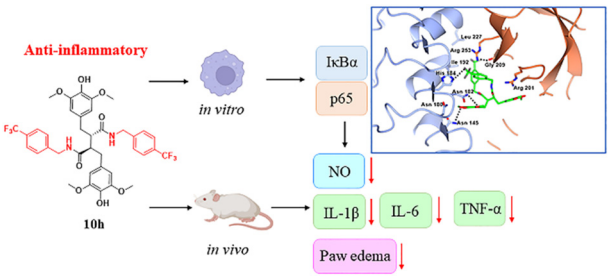
Hebatallah S. Ali* *et al.*



2114

Discovery of dibenzylbutane lignan LCA derivatives as potent anti-inflammatory agents

Zhen Wang, Juan Zhang, Conghao Gai, Jing Wang, Xiaobin Zhuo, Yan Song, Yan Zou, Peichao Zhang, Guige Hou, Qingguo Meng,* Qingjie Zhao* and Xiaoyun Chai*



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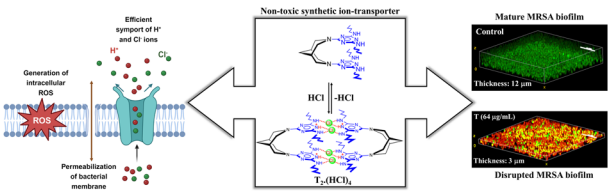
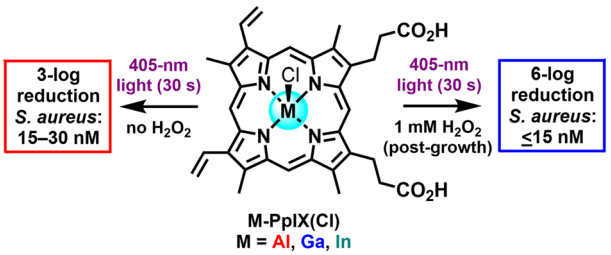
2127



Unveiling the potent activity of a synthetic ion transporter against multidrug-resistant Gram-positive bacteria and biofilms

Sudip Mukherjee, Sopan Valiba Shinde, Pinaki Talukdar and Jayanta Haldar*

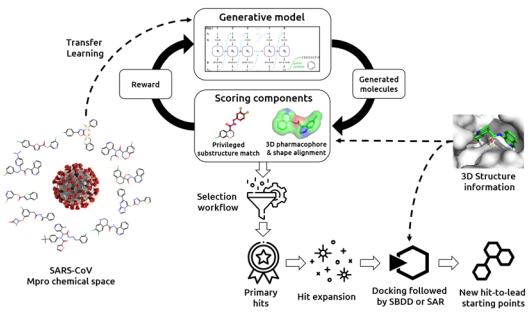
2138



Photodynamic treatment of *Staphylococcus aureus* with non-iron hemin analogs in the presence of hydrogen peroxide

Badhu Prashanthika Sivasubramaniam, Benjamin M. Washer, Yuichiro Watanabe, Kathryn E. Ragheb, J. Paul Robinson and Alexander Wei*

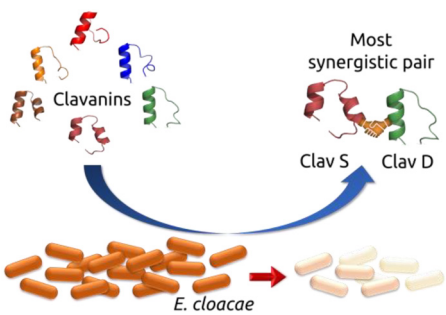
2146



Identification of SARS-CoV-2 Mpro inhibitors through deep reinforcement learning for *de novo* drug design and computational chemistry approaches

Julien Hazemann, Thierry Kimmerlin, Roland Lange, Aengus Mac Sweeney, Geoffroy Bourquin, Daniel Ritz and Paul Czodrowski*

2160



Synergy between the clavanins as a weapon against multidrug-resistant *Enterobacter cloacae*

Marvin D. Naing, Samuel A. Juliano and Alfredo M. Angeles-Boza*

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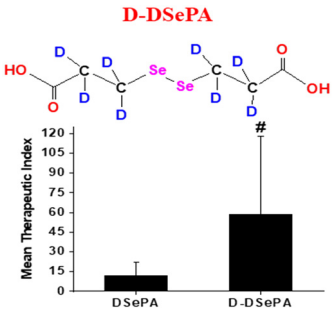
2165

Deuterium labeling improves the therapeutic index of 3,3′-diselenodipropionic acid as an anticancer agent: insights from redox reactions

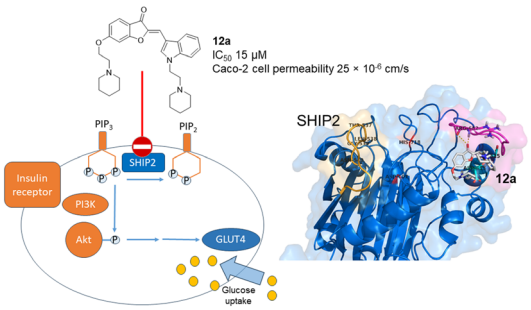
V. V. Gandhi, M. K. Pal, B. G. Singh, R. P. Das, A. P. Wadawale, S. Dey* and A. Kunwar*



2179

Discovery of aurones bearing two amine functionalities as SHIP2 inhibitors with insulin-sensitizing effect in rat myotubes

Phei Ching Lim, Beow Keat Yap, Yi Juin Tay, Nur Aziah Hanapi, Siti Rafidah Yusof and Chong-Yew Lee*



CORRECTION

2196

Correction: Highly potent and selective phosphatidylinositol 4-kinase IIIβ inhibitors as broad-spectrum anti-rhinoviral agents

Avinash G. Vishakantegowda, Dasom Hwang, Prashant Chakrasali, Eunhye Jung, Joo-Youn Lee, Jin Soo Shin* and Young-Sik Jung*