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Synthesis, molecular docking, and biological evaluation of 3-oxo-2-tolylhydrazinylidene-4,4,4-trifluorobutanoates bearing higher and natural alcohol moieties as new selective carboxylesterase inhibitors

Bioorganic Chemistry 91 (2019) 103097

Galina F. Makhaeva[a], Natalia A. Elkina[b], Evgeny V. Shchegolkov[b], Natalia P. Boltneva[a], Sofya V. Lushchekina[c], Olga G. Serebryakova[a], Elena V. Rudakova[a], Nadezhda V. Kovaleva[a], Eugene V. Radchenko[d], Vladimir A. Palyulin[d], Yanina V. Burgart[b], Victor I. Saloutin[b], Sergey O. Bachurin[a], Rudy J. Richardson[e,f]

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[b]*Postovsky Institute of Organic Synthesis, Urals Branch of Russian Academy of Sciences, Yekaterinburg 620990, Russia*
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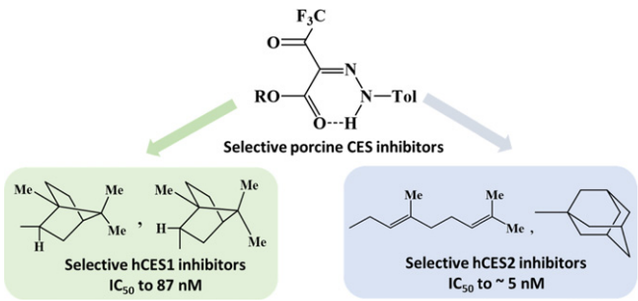

Chemo-sensitizing activity of natural cadinanes from *Heterotheca inuloides* in human uterine sarcoma cells and their *in silico* interaction with ABC transporters

Bioorganic Chemistry 91 (2019) 103091

José Luis Rodríguez-Chávez[a], Carlos A. Méndez-Cuesta[b], Teresa Ramírez-Apan[a], Verónica Egas[a], José Luis Ávila[a], Adriana Neira-González[a], Tzasna Hernández[c], Francisco J. Espinosa-García[d], Guillermo Delgado[a]

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[b]*Departamento de Sistemas Biológicos, Universidad Autónoma Metropolitana-Xochimilco, Calzada del Hueso 1100, Ciudad de México 04960, Mexico*
[c]*FES-Iztacala, Universidad Nacional Autónoma de México, Av. de los Barrios No. 1, Tlalnepantla 54090, Estado de México, Mexico*
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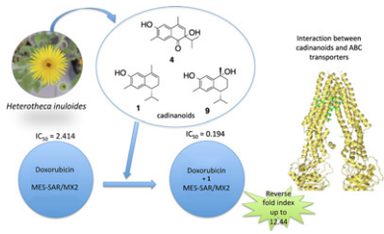

Bioactivatable reductive cleavage of azobenzene for controlling functional dumbbell oligodeoxynucleotides

Bioorganic Chemistry 91 (2019) 103106

Huajun Lei[b], Mengwu Mo[a], Yujian He[a,d], Ya Wu[c], Wufu Zhu[b], Li Wu[a,d]

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[c]*College of Chemistry and Chemical Engineering, Xi'an Shiyou University, Shanxi 710065, China*
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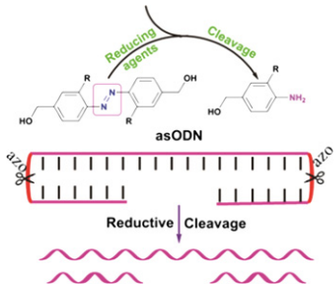

An efficient method for the synthesis of novel derivatives 4-{5-[4-(4-amino-5-mercapto-4*H*-[1,2,4] triazol-3-yl)-phenyl] -3-trifluoromethyl-pyrazol-1-yl}-benzenesulfonamide and their anti-inflammatory potential

Bioorganic Chemistry 91 (2019) 103110

Ghulam Mustafa[a,1], Andrea Angeli[b,1], Muhammad Zia-ur-Rehman[c], Nosheen Akbar[d], Saiqa Ishtiaq[e], Claudiu T. Supuran[b]

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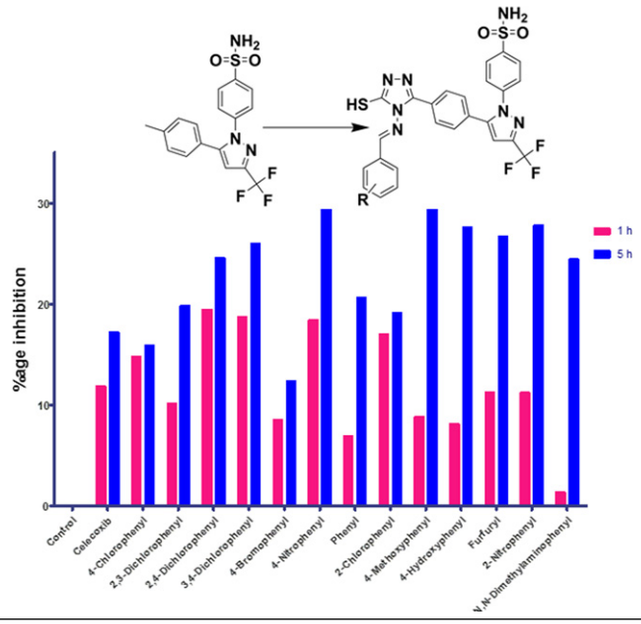
[e]*University College of Pharmacy, University of the Punjab, Lahore 54000, Pakistan*



Design, synthesis, molecular modeling and anti-hyperglycemic evaluation of phthalimide-sulfonylurea hybrids as PPAR? and SUR agonists

Bioorganic Chemistry 91 (2019) 103115

Mohamed Ayman El-Zahabi[a], Eman R. Elbendary[b], Faida H. Bamanie[c], Mohamed F. Radwan[d], Salah A. Ghareib[e], Ibrahim H. Eissa[a]

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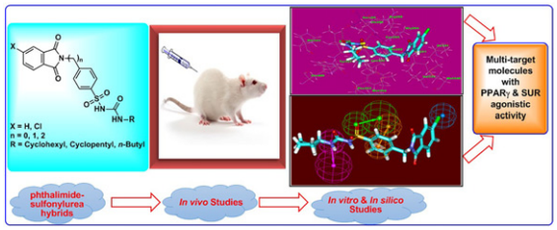
[e]*Pharmacology Department, Faculty of Pharmacy, King Abdulaziz University, Jeddah 21589, Saudi Arabia*



Flavonols and 4-thioflavonols as potential acetylcholinesterase and butyrylcholinesterase inhibitors: Synthesis, structure-activity relationship and molecular docking studies

Bioorganic Chemistry 91 (2019) 103124

Ehsan Ullah Mughal[a], Amina Sadiq[b], Jamshaid Ashraf[a], Muhammad Naveed Zafar[c], Sajjad Hussain Sumrra[a], Rubina Tariq[b], Amara Mumtaz[d], Asif Javid[a], Bilal Ahmad Khan[e], Anser Ali[f], Chaudhary Omer Javed[b]

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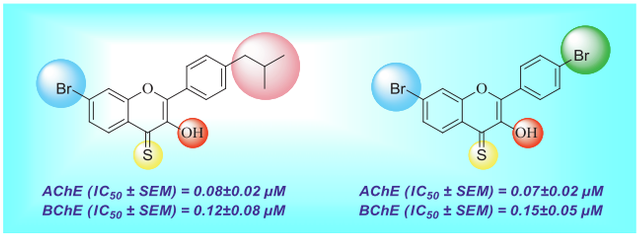

Anti-inflammatory and antiproliferative prenylated carbazole alkaloids from *Clausena vestita*

Bioorganic Chemistry 91 (2019) 103107

Yan-Ping Liu[a,b,c], Shi Hu[b,c], Yun-Yao Liu[a], Ming-Ming Zhang[b,c], Wen-Hao Zhang[b,c], Lei Qiang[a], Yan-Hui Fu[b,c]

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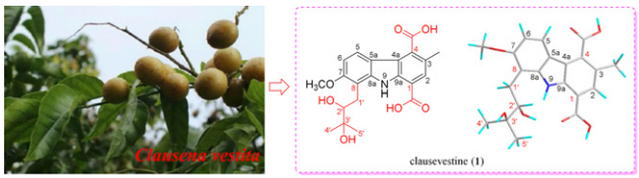

Optimization of a single HPLC-PDA method for quantifying Metformin, Gliclazide, Pioglitazone, Dapagliflozin, Empagliflozin, Saxagliptin, Linagliptin and Teneligliptin using central composite design

Bioorganic Chemistry 91 (2019) 103111

Ravi Kant, Ramesh Babu Bodla, Garima Kapoor, Rubina Bhutani

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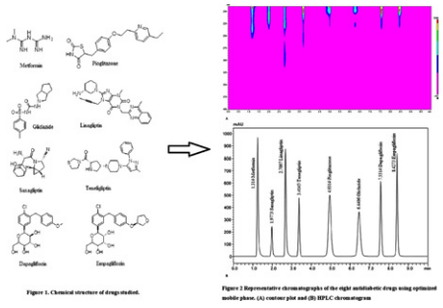

One-step immobilization and purification of genetic engineering CBD fusion EndoS on cellulose for antibodies Fc-glycan remodeling

Bioorganic Chemistry 91 (2019) 103114

Kai Zhao[a], Feng Tang[b], Wei Shi[b], Haofei Hong[a], Zhifang Zhou[a], Wei Huang[b], Zhimeng Wu[a]

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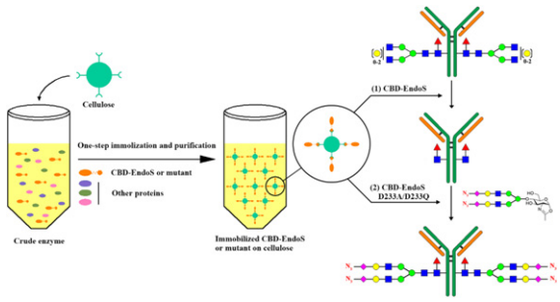

Revealing synergistic mechanism of multiple components in *Stauntonia brachyanthera* Hand.-Mazz. for gout by virtual screening and system pharmacological approach

Bioorganic Chemistry 91 (2019) 103118

Qiong-qiong Hua[a,b], Ying Liu[a], Cai-hong Liu[a], Li Liu[a], Da-li Meng[a,b]

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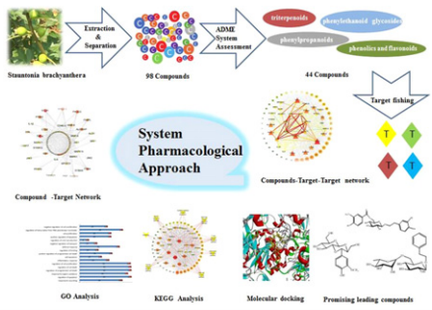

Ureidobenzenesulfonamides as efficient inhibitors of carbonic anhydrase II

Bioorganic Chemistry 91 (2019) 103123

Immo Serbian[a], Philipp Schwarzenberger[a], Anne Loesche[a], Sophie Hoenke[a], Ahmed Al-Harrasi[b], René Csuk[a]

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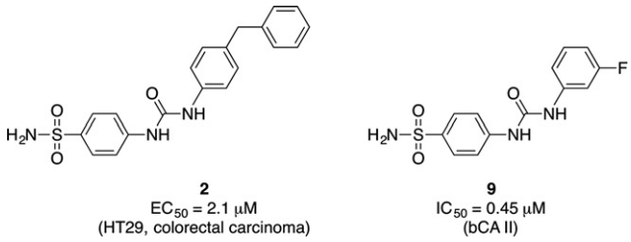

Amide-tethered quinoline-resorcinol conjugates as a new class of HSP90 inhibitors suppressing the growth of prostate cancer cells

Bioorganic Chemistry 91 (2019) 103119

Kunal Nepali[a,1], Mei-Hsiang Lin[a,1], Min-Wu Chao[b], Sheng-Jhih Peng[a], Kai-Cheng Hsu[b,d], Tony Eight Lin[b], Mei-Chuan Chen[c], Mei-Jung Lai[d], Shiow-Lin Pan[b,d], Jing-Ping Liou[a,c,d,e]

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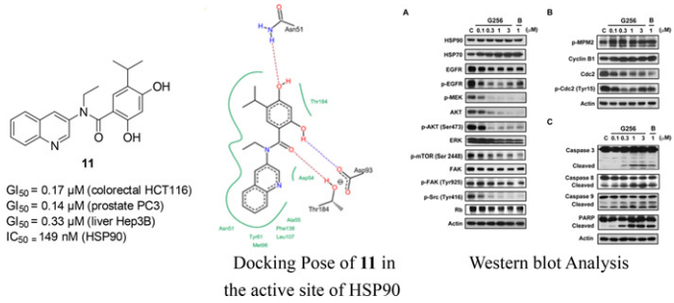

Synthesis of new arylhydrazide bearing Schiff bases/thiazolidinone: α-Amylase, urease activities and their molecular docking studies

Bioorganic Chemistry 91 (2019) 103112

Fazal Rahim[a], Muhammad Taha[b], Hayat Ullah[a], Abdul Wadood[c], Manikandan Selvaraj[d], Abdur Rab[a], Muhammad Sajid[e], Syed Adnan Ali Shah[f,g], Nizam Uddin[h], Mohammed Gollapalli[i]

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[g]Faculty of Pharmacy, Universiti Teknologi MARA Cawangan Selangor Kampus Puncak Alam, 42300 Bandar Puncak Alam, Selangor D. E., Malaysia
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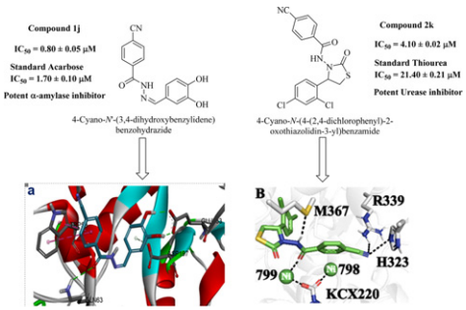

Phytoscreening of Vochysiaceae species: Molecular identification by HPLC-ESI-MS/MS and evaluating of their antioxidant activity and inhibitory potential against human a-amylase and protein glycation

Bioorganic Chemistry 91 (2019) 103122

R.R. Franco[a], A.B. Justino[a], M.M. Martins[a], C.G. Silva[b], P.R.V. Campana[b], J.C.D. Lopes[c], V.L. De Almeida[b], F.S. Espindola[a]

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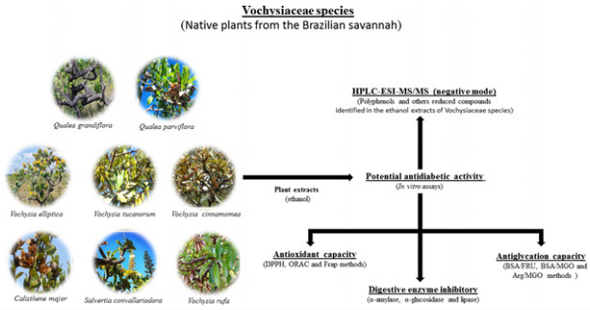

2,5-Disubstituted thiadiazoles as potent ß-glucuronidase inhibitors; Synthesis, *in vitro* and *in silico* studies

Bioorganic Chemistry 91 (2019) 103126

Muhammad Taha[a], Noor Barak Almandil[a], Umer Rashid[b], Muhammad Ali[c], Mohamed Ibrahim[a], Mohammed Gollapalli[d], Ashik Mosaddik[a], Khalid Mohammed Khan[a,e]

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[b]Department of Chemistry, COMSATS University, Islamabad, Pakistan
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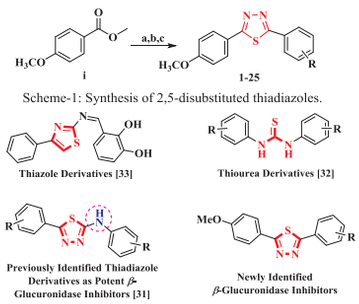
[d]College of Computer Science & Information Technology (CCSIT), Imam Abdulrahman Bin Faisal University, P.O. Box 1982, Dammam 31441, Saudi Arabia
[e]H.E.J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Karachi 75270, Pakistan



Scheme-1: Synthesis of 2,5-disubstituted thiadiazoles.

The 5-hydrazino-3-methylisothiazole-4-carboxylic acid, its new 5-substituted derivatives and their antiproliferative activity

Bioorganic Chemistry 91 (2019) 103082

Izabela Jeskowiak[a], Marcin Maczynski[a], Justyna Trynda[b], Joanna Wietrzyk[b], Stanislaw Ryng[a]

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Structural modifications and *in vitro* pharmacological evaluation of 4-pyridyl-piperazine derivatives as an active and selective histamine H_3 receptor ligands

Bioorganic Chemistry 91 (2019) 103071

Katarzyna Szczepanska[a], Tadeusz Karcz[a], Agata Siwek[b], Kamil J. Kuder[a], Gniewomir Latacz[a], Marek Bednarski[c], Malgorzata Szafarz[d], Stefanie Hagenow[e], Annamaria Lubelska[a], Agnieszka Olejarz-Maciej[a], Michal Sobolewski[a], Kamil Mika[c], Magdalena Kotanska[c], Holger Stark[e], Katarzyna Kiec-Kononowicz[a]

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[b]Department of Pharmacobiology, Faculty of Pharmacy, Jagiellonian University Medical College, Medyczna 9, Kraków 30-688, Poland
[c]Department of Pharmacodynamics, Faculty of Pharmacy, Jagiellonian University Medical College, Medyczna 9, Kraków 30-688, Poland
[d]Department of Pharmacokinetics and Physical Pharmacy, Jagiellonian University Medical College, Medyczna 9, Kraków 30-688, Poland
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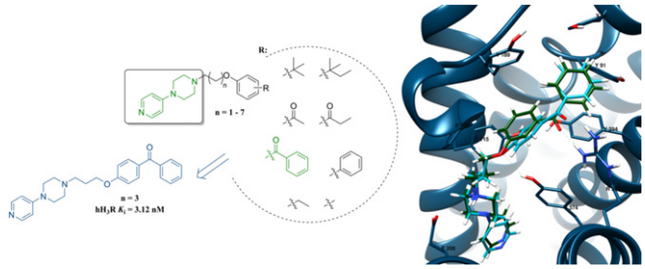

Utilization of tetrahydrobenzo [4,5] thieno [2,3-*d*] pyrimidinone as a cap moiety in design of novel histone deacetylase inhibitors

Bioorganic Chemistry 91 (2019) 103127

Mamdouh F.A. Mohamed[a], Bahaa G.M. Youssif[b,c], Montaser Sh. A. Shaykoon[d], Mostafa H. Abdelrahman[e], Bakheet E.M. Elsadek[f], Ahmed S. Aboraia[g], Gamal El-Din A. Abuo-Rahma[h]

[a]*Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Sohag University, 82524 Sohag, Egypt*
[b]*Department of Pharmaceutical Organic Chemistry, Faculty of Pharmacy, Assiut University, Assiut 71526, Egypt*
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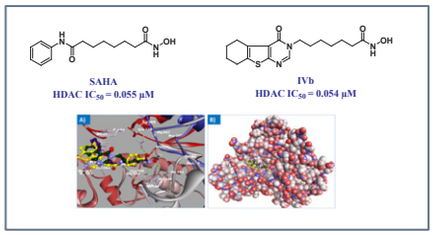

Synthesis, *in-vitro* a-glucosidase inhibition, antioxidant, *in-vivo antidiabetic* and molecular docking studies of pyrrolidine-2,5-dione and thiazolidine-2,4-dione derivatives

Bioorganic Chemistry 91 (2019) 103128

Fida Hussain[a,b], Zeeshan Khan[c], Muhammad Saeed Jan[a], Sajjad Ahmad[a], Ashfaq Ahmad[a], Umer Rashid[c], Farhat Ullah[a], Muhammad Ayaz[a], Abdul Sadiq[a,??]

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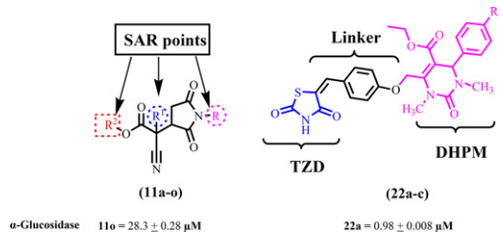

Sulfonamides incorporating piperazine bioisosteres as potent human carbonic anhydrase I, II, IV and IX inhibitors

Bioorganic Chemistry 91 (2019) 103130

Niccolò Chiaramonte[a], Silvia Bua[a], Andrea Angeli[a], Marta Ferraroni[b], Ilaria Picchioni[a], Gianluca Bartolucci[a], Laura Braconi[a], Silvia Dei[a], Elisabetta Teodori[a], Claudiu T. Supuran[a], Maria Novella Romanelli[a]

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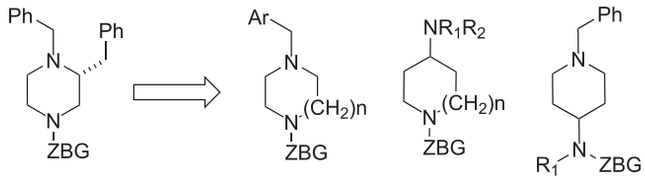

Zn-Binding Group (ZBG) = $COC_6H_4SO_2NH_2$
n = 0,1, 2; Ar = 3 or 4 substituted Ph; R_1, R_2 = H, CH_3, Bn

Thiohydantoin derivatives incorporating a pyrazole core: Design, synthesis and biological evaluation as dual inhibitors of topoisomerase-I and cycloxygenase-2 with anti-cancer and anti-inflammatory activities

Bioorganic Chemistry 91 (2019) 103132

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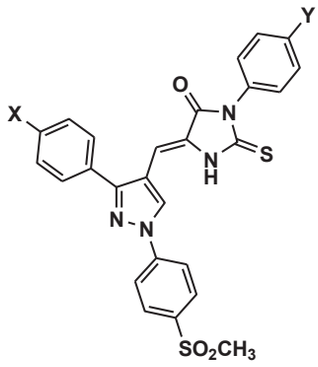


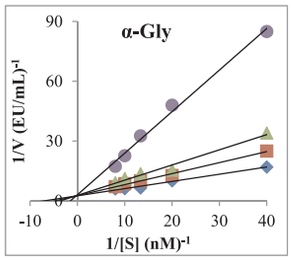
X=H, Cl, Br, NO_2, OCH_3, $NHSO_2CH_3$
Y= H, OCH_3

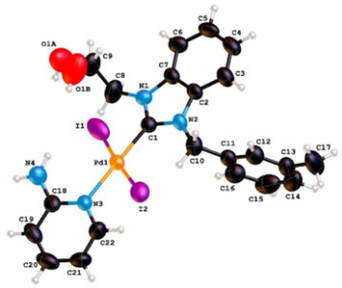
Novel 2-aminopyridine liganded Pd(II) *N*-heterocyclic carbene complexes: Synthesis, characterization, crystal structure and bioactivity properties

Bioorganic Chemistry 91 (2019) 103134

Fatos Erdemir[a], Duygu Barut Celepci[b], Aydin Aktas[a], Yetkin Gök[a], Ruya Kaya[c,d], Parham Taslimi[e], Yeliz Demir[f], Ilhami Gulçin[d]

[a]*Department of Chemistry, Faculty of Arts and Sciences, Inönü University, 44280 Malatya, Turkey*
[b]*Dokuz Eylül University, Faculty of Science, Department of Physics, 35160 Buca, Izmir, Turkey*
[c]*Central Research and Applications Laboratory, Agri Ibrahim Cecen University, 04100 Agri, Turkey*
[d]*Department of Chemistry, Faculty of Sciences, Ataturk University, 25240 Erzurum, Turkey*
[e]*Department of Biotechnology, Faculty of Science, Bartin University, 74100 Bartin, Turkey*
[f]*Department of Pharmacy Services, Nihat Delibalta Göle Vocational High School, Ardahan University, 75700 Ardahan, Turkey*



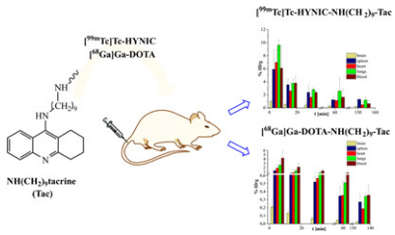


Synthesis, physicochemical and biological evaluation of tacrine derivative labeled with technetium-99m and gallium-68 as a prospective diagnostic tool for early diagnosis of Alzheimer's disease

Bioorganic Chemistry 91 (2019) 103136

Ewa Gniazdowska[a], Przemyslaw Kozminski[a,1], Pawel Halik[a], Marek Bajda[b], Kamila Czarnecka[c], Elzbieta Mikiciuk-Olasik[c], Katarzyna Maslowska[a], Zbigniew Rogulski[d], Lukasz Cheda[d], Krzysztof Kilian[e], Pawel Szymanski[c]

[a]*Centre of Radiochemistry and Nuclear Chemistry, Institute of Nuclear Chemistry and Technology, 03-195 Warsaw, Poland*
[b]*Department of Physicochemical Drug Analysis, Faculty of Pharmacy, Jagiellonian University Medical College, 30-688 Krakow, Poland*
[c]*Department of Pharmaceutical Chemistry, Drug Analyses and Radiopharmacy, Medical University, 90-151 Lodz, Poland*
[d]*Faculty of Chemistry, Biological and Chemical Research Centre, University of Warsaw, Zwirki i Wigury 101, 02-089 Warszawa, Poland*
[e]*Heavy Ion Laboratory, University of Warsaw, 5a Pasteur Str., 02-093 Warsaw, Poland*



Design, synthesis and biological evaluation of trinary benzocoumarin-thiazoles-azomethines derivatives as effective and selective inhibitors of alkaline phosphatase

Bioorganic Chemistry 91 (2019) 103137

Pervaiz Ali Channar[a], Hina Irum[b], Abid Mahmood[b], Ghulam Shabir[a], Sumera Zaib[b], Aamer Saeed[a], Zaman Ashraf[c], Fayaz Ali Larik[a], Joanna Lecka[d,e], Jean Sévigny[d,e], Jamshed Iqbal[b]

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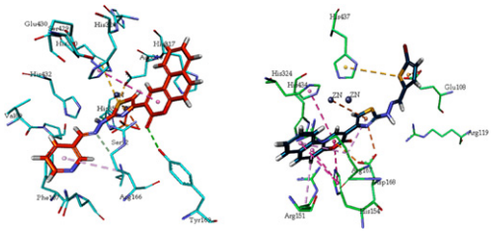
[b]*Centre for Advanced Drug Research, COMSATS University Islamabad, Abbottabad Campus, Abbottabad 22060, Pakistan*
[c]*Department of Chemistry, Allama Iqbal Open University, Islamabad, Pakistan*
[d]*Département de microbiologie-infectiologie et d'immunologie, Faculté de Médecine, Université Laval, Québec, QC G1V 0A6, Canada*
[e]*Centre de Recherche du CHU de Québec – Université Laval, Québec, QC G1V 4G2, Canada*



Designing of promising medicinal scaffolds for Alzheimer's disease through enzyme inhibition, lead optimization, molecular docking and dynamic simulation approaches

Bioorganic Chemistry 91 (2019) 103138

Mubashir Hassan[a], Muhammad Athar Abbasi[b], Aziz-ur-Rehman[b], Sabahat Zahra Siddiqui[b], Saba Shahzadi[c], Hussain Raza[d], Ghulam Hussain[b], Syed Adnan Ali Shah[e,f], Muhamamd Ashraf[g], Muhammad Shahid[h], Sung-Yum Seo[d], Arif Malik[a]

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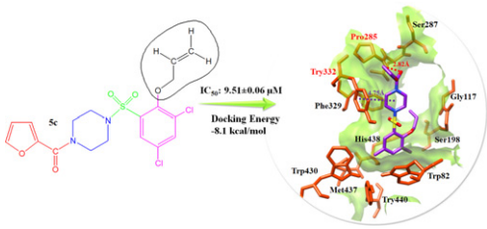
[c]Institute of Molecular Science and Bioinformatics, Nisbat Road, Lahore, Pakistan
[d]College of Natural Science, Department of Biological Sciences, Kongju National University, Gongju 32588, South Korea
[e]Faculty of Pharmacy, Universiti Teknologi MARA, Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor Darul Ehsan, Malaysia
[f]Atta-ur-Rahman Institute for Natural Products Discovery (AuRIns), Level 9, FF3, Universiti Teknologi MARA, Puncak Alam Campus, 42300 Bandar Puncak Alam, Selangor Darul Ehsan, Malaysia
[g]Department of Chemistry, The Islamia University of Bahawalpur, Bahawalpur 63100, Pakistan
[h]Department of Biochemistry, University of Agriculture, Faisalabad 38040, Pakistan

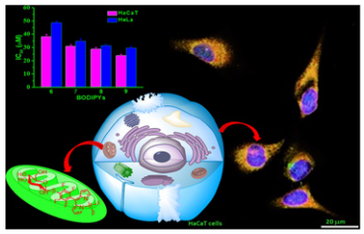


Water soluble thioglycosylated BODIPYs for mitochondria targeted cytotoxicity

Bioorganic Chemistry 91 (2019) 103139

Praseetha E. Kesavan[a], Vijayalakshmi Pandey[a], Md Kausar Raza[b], Shigeki Mori[c], Iti Gupta[a]

[a]Indian Institute of Technology Gandhinagar, Palaj Campus, Gandhinagar, Gujarat 382355, India
[b]Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore 560012, India
[c]Integrated Centre for Sciences, Ehime University, Matsuyama 790-8577, Japan



Tyrosol from marine Fungi, a novel Quorum sensing inhibitor against *Chromobacterium violaceum* and *Pseudomonas aeruginosa*

Bioorganic Chemistry 91 (2019) 103140

Aiping Chang[a,1], Shiwei Sun[b,1], Li Li[a], Xiaoyun Dai[c], Hui Li[c], Qiaomei He[a], Hu Zhu[a]

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[b]Department of Natural Medicine and Pharmacognosy, School of Pharmacy, Qingdao University, 308 Ningxia Road, Qingdao 266071, People's Republic of China
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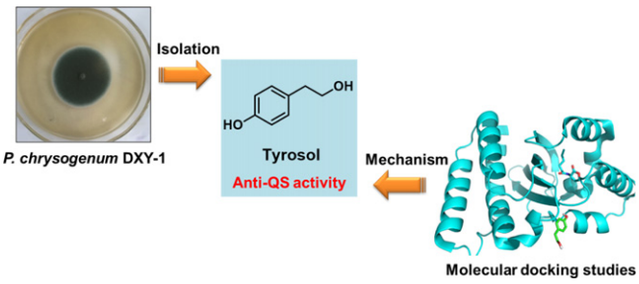

Design, synthesis, biological and *in silico* evaluation of coumarin-hydrazone derivatives as tubulin targeted antiproliferative agents

Bioorganic Chemistry 91 (2019) 103143

Pilli Govindaiah[a], Naresh Dumala[b], Irshad Mattan[a], Paramjit Grover[b], M. Jaya Prakash[a]

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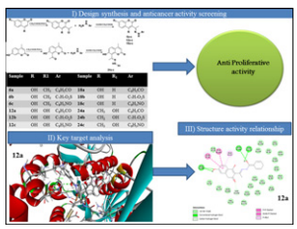
[b]Toxicology Laboratory, Applied Biology Department, CSIR – Indian Institute Of Chemical Technology, Hyderabad 500007, Telangana, India



Chemical constituents of the root bark of *Ulmus davidiana* var. *japonica* and their potential biological activities

Bioorganic Chemistry 91 (2019) 103145

Hae Min So[a,1], Jae Sik Yu[a,1], Zarha Khan[b], Lalita Subedi[b], Yoon-Joo Ko[c], Il Kyun Lee[d], Woo Sung Park[e], Sang J. Chung[a], Mi-Jeong Ahn[e], Sun Yeou Kim[b], Ki Hyun Kim[a]

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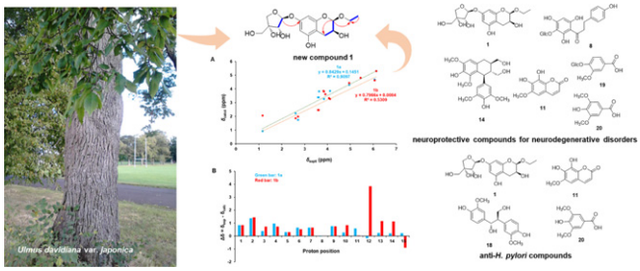

Design, synthesis and biological evaluation of 4-aminoquinoline-guanylthiourea derivatives as antimalarial agents

Bioorganic Chemistry 91 (2019) 103094

Shweta Bhagat[a], Minhajul Arfeen[a], Gourav Das[a], Mridula Ramkumar[b], Shabana I. Khan[c], Babu L. Tekwani[c], Prasad V. Bharatam[a]

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[b]*Department of Pharmacoinformatics, National Institute of Pharmaceutical Education and Research, Sector-67, S.A.S. Nagar 160062, Punjab, India*
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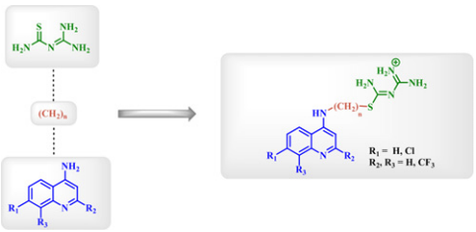
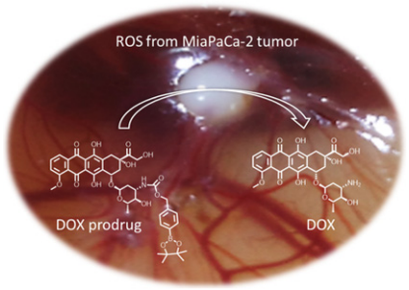


Arylboronate prodrugs of doxorubicin as promising chemotherapy for pancreatic cancer

Bioorganic Chemistry 91 (2019) 103158

Charles Skarbek, Silvia Serra, Hichem Maslah, Estelle Rascol, Raphaël Labruère

Institut de Chimie Moléculaire et des Matériaux d'Orsay (ICMMO), CNRS, Univ Paris Sud, Université Paris-Saclay, 15 rue Georges Clemenceau, 91405 Orsay Cedex, France



N-substituted noscapine derivatives as new antiprotozoal agents: Synthesis, antiparasitic activity and molecular docking study

Bioorganic Chemistry 91 (2019) 103116

Kosar Babanezhad Harikandei[a], Peyman Salehi[a], Samad Nejad Ebrahimi[a], Morteza Bararjanian[a], Marcel Kaiser[b,c], Hamid Reza Khavasi[d], Ahmed Al-Harrasi[e]

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[b]*Swiss Tropical and Public Health Institute, Basel, Switzerland*
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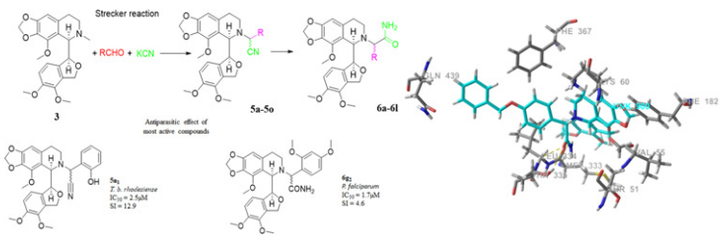
[e]*National and Medical Sciences Research Center, University of Nizwa, P.O. Box 33, Birkat Al-Mauz, Nizwa 611, Oman*

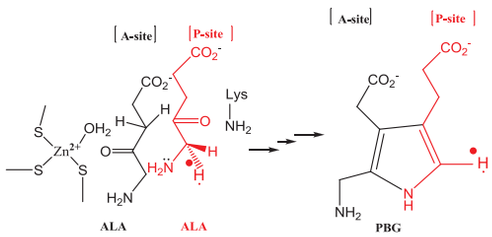


Mechanistic studies on *Pyrobaculum calidifontis* porphobilinogen synthase (5-aminolevulinic acid dehydratase)

Bioorganic Chemistry 91 (2019) 103117

Naseema Azim[a], Qurratulann Afza Gardner[a], Naeem Rashid[a], Muhammad Akhtar[a,b]

[a]*School of Biological Sciences, University of the Punjab, New Campus, Lahore 54590, Pakistan*
[b]*Biological Sciences, University of Southampton SO17 1BJ, UK*

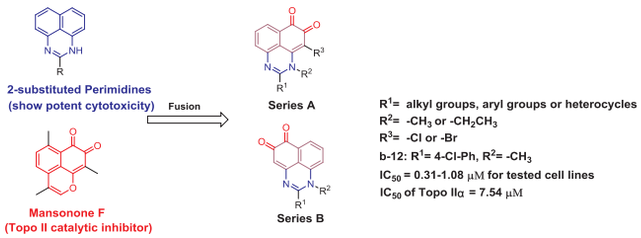


Design, synthesis and biological evaluation of novel perimidine *o*-quinone derivatives as non-intercalative topoisomerase II catalytic inhibitors

Bioorganic Chemistry 91 (2019) 103131

Du-Chao Zhou, Yu-Ting Lu, Yan-Wen Mai, Chen Zhang, Jie Xia, Pei-Fen Yao, Hong-Gen Wang, Shi-Liang Huang, Zhi-Shu Huang

School of Pharmaceutical Sciences, Sun Yat-sen University, Guangzhou 510006, People's Republic of China

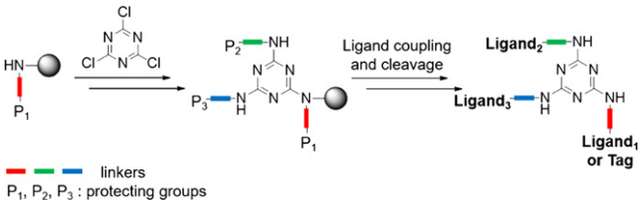


A solid-phase method for synthesis of dimeric and trimeric ligands: Identification of potent bivalent ligands of 14-3-3s

Bioorganic Chemistry 91 (2019) 103141

Yeongju Lee[1], Brian Chung[1], Daseul Ko, Hyun-Suk Lim

Department of Chemistry and Division of Advanced Material Science, Pohang University of Science and Technology (POSTECH), Pohang 37673, South Korea



Synthesis of novel methyl jasmonate derivatives and evaluation of their biological activity in various cancer cell lines

Bioorganic Chemistry 91 (2019) 103146

Bilgesu Onur Sucu[a,b], Ozgecan Savlug Ipek[b,c], Sukran Ozdatli Kurtulus[b], Busra Emine Yazici[b,d], Nihal Karakas[b,d], Mustafa Guzel[b,e]

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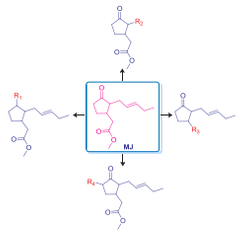
[b]*Istanbul Medipol University, Regenerative and Restorative Medicine Research Center (REMER), Kavacik Campus, Kavacik-Beykoz, Istanbul 34810, Turkey*
[c]*Yildiz Technical University, Graduate School of Natural and Applied Sciences, Department of Chemistry, Besiktas, Istanbul 34349, Turkey*
[d]*Istanbul Medipol University, School of Medicine, Department of Medical Biology, Kavacik Campus, Kavacik-Beykoz, Istanbul 34810, Turkey*
[e]*Istanbul Medipol University, International School of Medicine, Department of Medical Pharmacology, Kavacik Campus, Kavacik-Beykoz, Istanbul 34810, Turkey*



Lysosome imaging in cancer cells by pyrene-benzothiazolium dyes: An alternative imaging approach for LAMP-1 expression based visualization methods to avoid background interference

Bioorganic Chemistry 91 (2019) 103144

Chathura S. Abeywickrama[a,1], Kaveesha J. Wijesinghe[c,1], Robert V. Stahelin[d], Yi Pang[a,b]

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[b]Maurice Morton Institute of Polymer Science, University of Akron, Akron, OH 44325, USA
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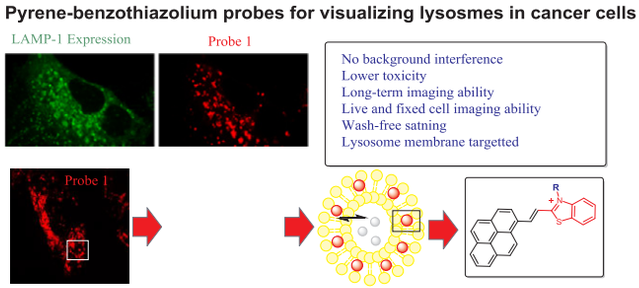
[d]Department of Medicinal Chemistry and Molecular Pharmacology and the Purdue Center for Cancer Research, Purdue University, West Lafayette, IN 47907, USA



Ugi efficient synthesis, biological evaluation and molecular docking of coumarin-quinoline hybrids as apoptotic agents through mitochondria-related pathways

Bioorganic Chemistry 91 (2019) 103147

Salman Taheri[a], Maryam Nazifi[a], Mahboubeh Mansourian[b,c], Leila Hosseinzadeh[d], Yalda Shokoohinia[d,e]

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[b]Medicinal Plants Research Center, Yasuj University of Medical Sciences, Yasuj, Iran
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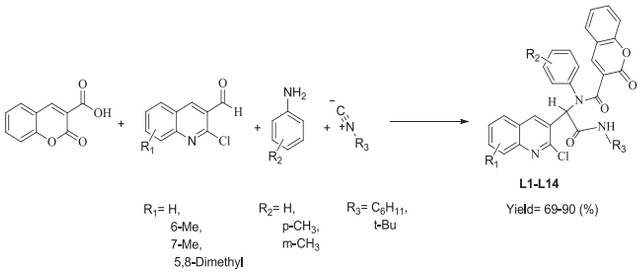
[d]Pharmaceutical Sciences Research Center, School of Pharmacy, Kermanshah University of Medical Sciences, Kermanshah, Iran
[e]Ric Scalzo Botanical Research Institute, Southwest College of Naturopathic Medicine, Tempe, AZ, USA



Identification of novel peptidomimetics targeting the polo-box domain of polo-like kinase 1

Bioorganic Chemistry 91 (2019) 103148

Zhiyan Li[a,b], Zhenguo Zhang[a,b], Huiyong Sun[b], Lili Xu[a,c], Cheng Jiang[a,b,c]

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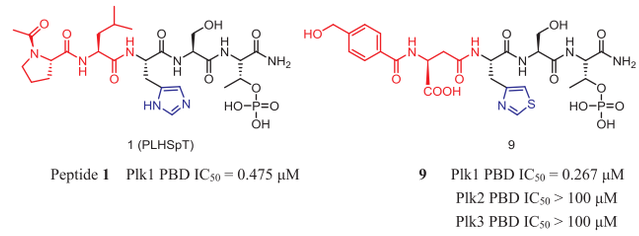
[b]Department of Medicinal Chemistry, China Pharmaceutical University, Nanjing 210009, China
[c]Key Laboratory on Protein Chemistry and Structural Biology, China Pharmaceutical University, Nanjing 210009, China



Discovery, synthesis and molecular substantiation of N-(benzo[*d*]thiazol-2-yl)-2-hydroxyquinoline-4-carboxamides as anticancer agents

Bioorganic Chemistry 91 (2019) 103171

B. Bindu[a], S. Vijayalakshmi[a,??], A. Manikandan[b]

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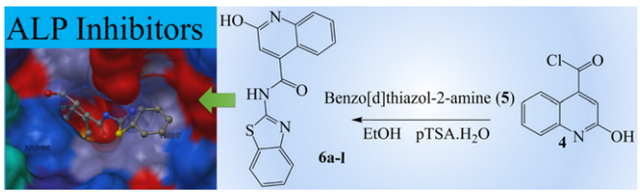
[b]Dept. of Biotech, School of Biosciences and Technology, VIT University, Vellore 632014, Tamil Nadu, India



Synthesis, biological evaluation and molecular docking studies of bis-chalcone derivatives as xanthine oxidase inhibitors and anticancer agents

Bioorganic Chemistry 91 (2019) 103149

Serdar Burmaoglu[a,b,1], Seyda Ozcan[b], Sevgi Balcioglu[c], Melis Gencel[d], Samir Abbas Ali Noma[c], Sebnem Essiz[d], Burhan Ates[c], Oztekin Algul[e,1]

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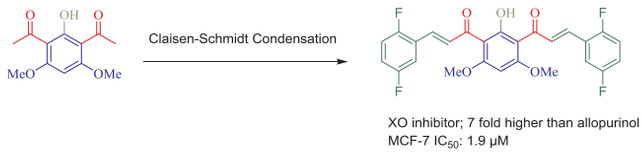
[b]*Deparment of Chemistry, Faculty of Science, Ataturk University, Erzurum 25240, Turkey*
[c]*Department of Chemistry, Faculty of Science and Arts, Inönü University, Malatya 44280, Turkey*
[d]*Bioinformatics and Genetics Department, Faculty of Engineering and Natural Sciences, Kadir Has University, Istanbul 34083, Turkey*
[e]*Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Mersin University, Mersin 33169, Turkey*



Synthesis, molecular docking analysis and carbonic anhydrase I-II inhibitory evaluation of new sulfonamide derivatives

Bioorganic Chemistry 91 (2019) 103153

Begüm Nurpelin Saglik[a,b], Ulviye Acar Çevik[a,b], Derya Osmaniye[a,b], Serkan Levent[a,b], Betul Kaya Çavusoglu[a], Yeliz Demir[c], Sinem Ilgin[d], Yusuf Özkay[a,b], Ali Savas Koparal[e], Sükrü Beydemir[f], Zafer Asim Kaplancikli[a]

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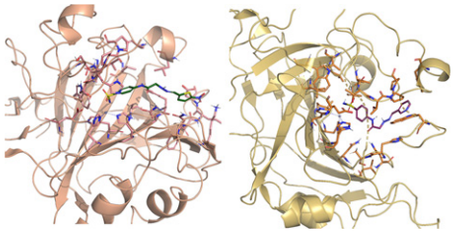
[b]*Doping and Narcotic Compounds Analysis Laboratory, Faculty of Pharmacy, Anadolu University, 26470 Eskisehir, Turkey*
[c]*Department of Pharmacy Services, Nihat Delibalta Göle Vocational High School, Ardahan University, 75700 Ardahan, Turkey*
[d]*Department of Toxicology, Faculty of Pharmacy, Anadolu University, 26470 Eskisehir, Turkey*
[e]*Open Education Faculty, Anadolu University, 26470 Eskisehir, Turkey*
[f]*Department of Biochemistry, Faculty of Pharmacy, Anadolu University, 26470 Eskisehir, Turkey*

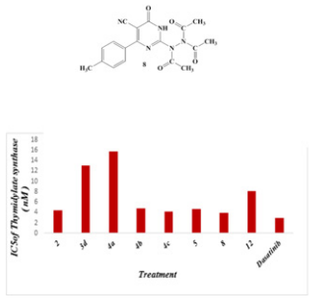


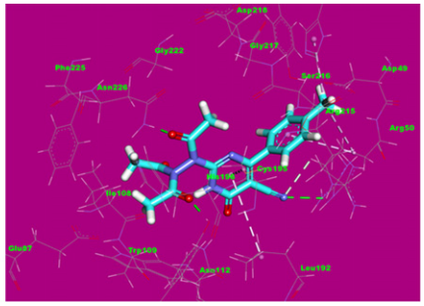
Design, synthesis, anticancer evaluation and docking studies of new pyrimidine derivatives as potent thymidylate synthase inhibitors

Bioorganic Chemistry 91 (2019) 103159

Lamia H.T. Amin[a], Taghreed Z. Shawer[a], Abeer M. El-Naggar[b], Hend M.A. El-Sehrawi[a]

[a]*Department of Pharmaceutical Chemistry, Faculty of Pharmacy (girls), Al-Azhar University, Nasr City, Cairo, Egypt*
[b]*Department of Organic Chemistry, Faculty of Science, Ain Shams University, Abbassia, 11566 Cairo, Egypt*





Synthesis and biological evaluation of bergenin-1,2,3-triazole hybrids as novel class of anti-mitotic agents

Bioorganic Chemistry 91 (2019) 103161

P. Pavan Kumar[a,1], Bandi Siva[a,1], Banoth Venkateswara Rao[a], G. Dileep Kumar[a], V. Lakshma Nayak[b], S. Nishant Jain[b], Ashok K Tiwari[a], U. Purushotham[c], C. Venkata Rao[d], K. Suresh Babu[a]

[a]*Centre for Natural Products & Traditional Knowledge, CSIR-Indian Institute of Chemical Technology, Hyderabad 500 007, India*
[b]*Division of Applied Biology, CSIR-Indian Institute of Chemical Technology, Uppal Road, Hyderabad 500607, India*
[c]*Qstatix Private Limited, Hyderabad 500035, India*
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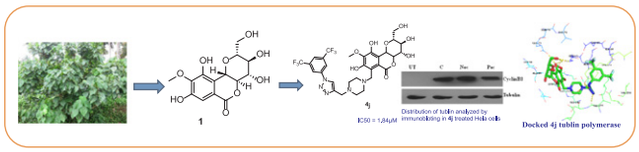

Antifungal activity and tautomeric cyclization equilibria of formylphenylboronic acids

Bioorganic Chemistry 91 (2019) 103081

Krzysztof M. Borys[a,1], Dorota Wieczorek[b,1], Kamila Pecura[a], Jacek Lipok[b], Agnieszka Adamczyk-Wozniak[a]

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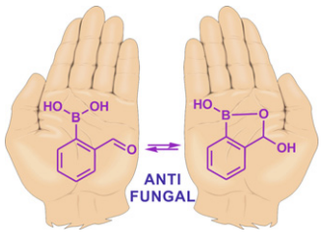

Searching new structural scaffolds for BRAF inhibitors. An integrative study using theoretical and experimental techniques

Bioorganic Chemistry 91 (2019) 103125

Ludmila E. Campos[a,b], Francisco M. Garibotto[a,b], Emilio Angelina[c], Jiri Kos[d], Tihomir Tomašic[e], Nace Zidar[e], Danijel Kikelj[e], Tomas Gonec[f], Pavlina Marvanova[f], Petr Mokry[f], Josef Jampilek[d,g], Sergio E. Alvarez[a,b], Ricardo D. Enriz[a,b]

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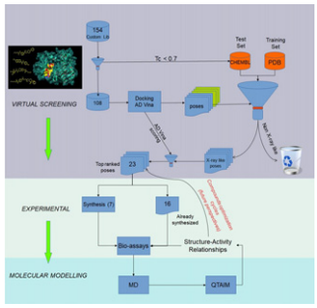

Novel steroidal 1,3,4-thiadiazines: Synthesis and biological evaluation in androgen receptor-positive prostate cancer 22Rv1 cells

Bioorganic Chemistry 91 (2019) 103142

Anna S. Komendantova[a], Alexander M. Scherbakov[b], Alexander V. Komkov[a], Viktoriya V. Chertkova[a], Alexey O. Gudovanniy[a], Elena I. Chernoburova[a], Danila V. Sorokin[b], Yaraslau U. Dzichenka[c], Valerii Z. Shirinian[a], Yulia A. Volkova[a], Igor V. Zavarzin[a]

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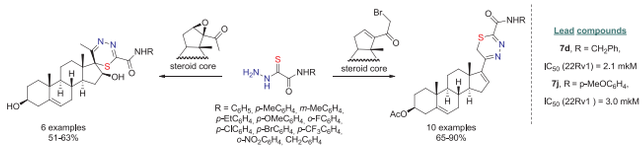

Synthesis of 3-indolylmethyl substituted (pyrazolo/benzo) triazinone derivatives under Pd/Cu-catalysis: Identification of potent inhibitors of chorismate mutase (CM)

Bioorganic Chemistry 91 (2019) 103155

Gangireddy Sujeevan Reddy[a,b], Ampalam Venkata Snehalatha[a], Rebecca Kristina Edwin[a], Kazi Amirul Hossain[a], Varadaraj Bhat Giliyaru[b], Raghu Chandrashekhar Hariharapura[b], G. Gautham Shenoy[b], Parimal Misra[a], Manojit Pal[a]

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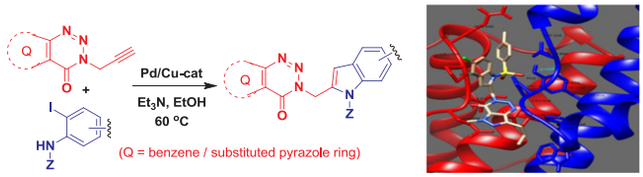

The novel economical synthesis and antimicrobial activity of a trithiocarbonate derivative

Bioorganic Chemistry 91 (2019) 103157

Yahia N. Mabkhot[a], Jamal M.A. Khaled[b], Mujeeb A.S. Sultan[c,d], Naiyf S.H.A. Alharbi[b], Salim S. Al-Showiman[e], Hazem A. Ghabbour[f], Abdulrahman Alsayari[g], Abdullatif Bin Muhsinah[g], H. Algarni[h,i]

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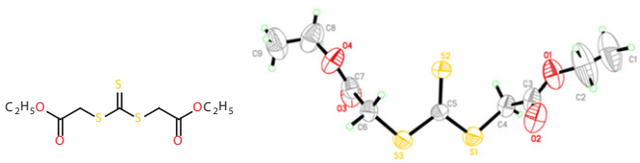

Labeling of VEGFR1D2 through oxime ligation

Bioorganic Chemistry 91 (2019) 103160

Lucia De Rosa[a], Rossella Di Stasi[a], Laura Longhitano[a], Luca Domenico D'Andrea[a,b]

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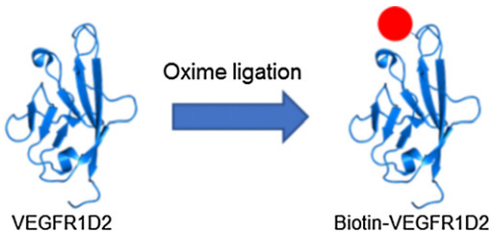

New classes of carbazoles as potential multi-functional anti-Alzheimer's agents

Bioorganic Chemistry 91 (2019) 103164

Niloufar Choubdar[a], Mostafa Golshani[b], Leili Jalili-Baleh[b], Hamid Nadri[c], Tuba Tüylü Küçükkilinç[d], Beyza Ayazgök[d], Alireza Moradi[c], Farshad Homayouni Moghadam[e], Zahra Abdolahi[c], Alieh Ameri[f], Fatemeh Salehian[b], Alireza Foroumadi[b], Mehdi Khoobi[b]

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[d]*Hacettepe University, Faculty of Pharmacy, Department of Biochemistry, Ankara, Turkey*
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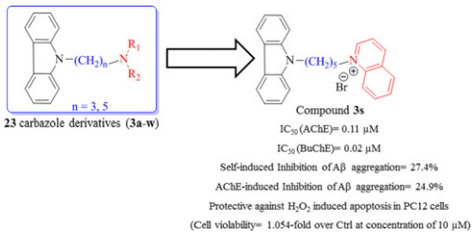
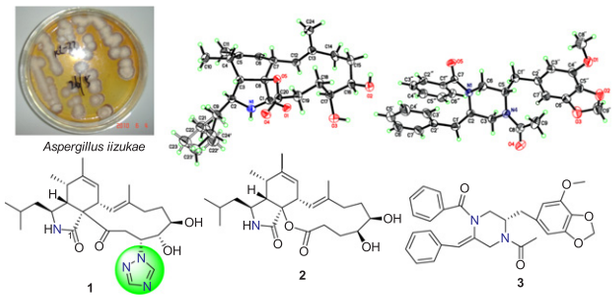


Iizukines C-E from a saline soil fungus *Aspergillus iizukae*

Bioorganic Chemistry 91 (2019) 103167

Hui-Hui Kang, Mei-Jia Zhong, Li-Ying Ma, Xian-Guo Rong, De-Sheng Liu, Wei-Zhong Liu

College of Pharmacy, Binzhou Medical University, Yantai 264003, China



Strategy and validation of a structure-based method for the discovery of selective inhibitors of PAK isoforms and the evaluation of their anti-cancer activity

Bioorganic Chemistry 91 (2019) 103168

Pei-Lu Song[a], Gang Wang[c], Yuan Su[a], Han-Xun Wang[a], Jian Wang[a], Feng Li[b], Mao-Sheng Cheng[a]

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[b]*Department of Cell Biology, Key Laboratory of Cell Biology, Ministry of Public Health, and Key Laboratory of Medical Cell Biology, Ministry of Education, China Medical University, Shenyang 110001, China*
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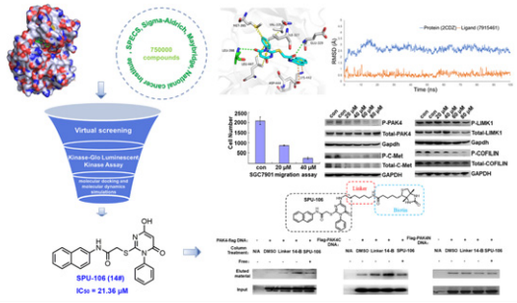

Natural neuroprotective alkaloids from *Stephania japonica* (Thunb.) Miers

Bioorganic Chemistry 91 (2019) 103175

Jiao Xiao[a], Tingyu Hao[d,e], Gang Chen[a], Junyu Song[a], Bin Lin[b], Wei Li[a,c], Jikai Xu[d,e], Jingyu Liu[d,e], Yue Hou[d,e], Ning Li[a,e]

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[b]*School of Pharmaceutical Engineering, Shenyang Pharmaceutical University, Shenyang 110016, PR China*
[c]*Faculty of Pharmaceutical Sciences, Toho University, Miyama 2-2-1, Funabashi, Chiba 274-8510, Japan*
[d]*College of Life and Health Sciences, Northeastern University, Shenyang 110004, PR China*
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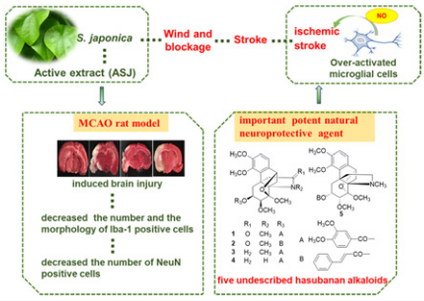

Tyrosine-based asymmetric urea ligand for prostate carcinoma: Tuning biological efficacy through *in silico* studies

Bioorganic Chemistry 91 (2019) 103154

Sagnik Sengupta[a], Mena Asha Krishnan[b], Amit Pandit[a], Premansh Dudhe[a], Rajesh Sharma[c], Venkatesh Chelvam[a,b]

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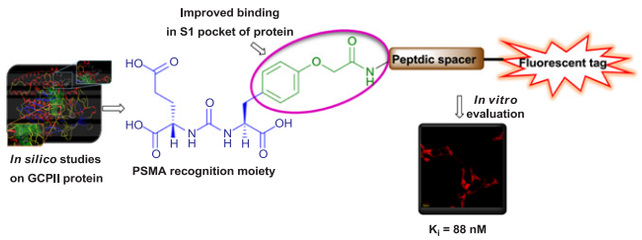
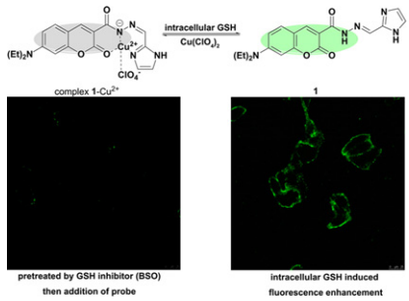


Synthesis and application of a “turn on” fluorescent probe for glutathione based on a copper complex of coumarin hydrazide Schiff base derivative

Bioorganic Chemistry 91 (2019) 103176

Guangjie He, Xiaobo Hua, Nan Yang, Linlin Li, Jinhe Xu, Linlin Yang, Qingzhi Wang, Liguo Ji

Xinxiang Key Laboratory of Forensic Science Evidence, School of Forensic Medicine, Xinxiang Medical University, Jinsui Road No. 601, Xinxiang 453003, Henan Province, PR China



New phenolic cinnamic acid derivatives as selective COX-2 inhibitors. Design, synthesis, biological activity and structure-activity relationships

Bioorganic Chemistry 91 (2019) 103179

Daniela Ribeiro[a], Carina Poença[a], Carla Varela[b,c], João Janela[b], Elisiário J. Tavares da Silva[b,c], Eduarda Fernandes[a], Fernanda M.F. Roleira[b,c]

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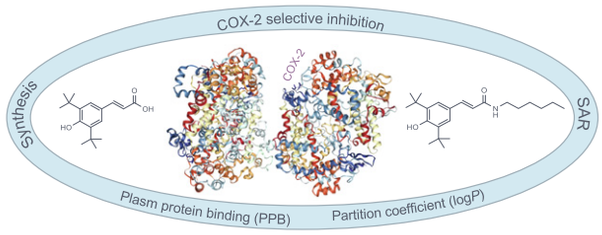
[c]*CIEPQPF Centre for Chemical Processes Engineering and Forest Products, University of Coimbra, 3030-790 Coimbra, Portugal*

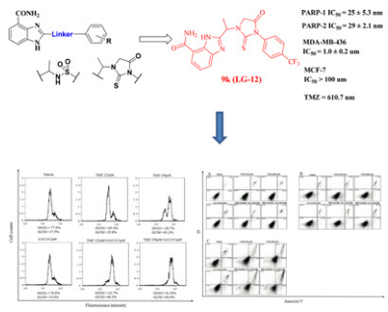


Design, synthesis and evaluation of phthalazinone thiohydantoin-based derivative as potent PARP-1 inhibitors

Bioorganic Chemistry 91 (2019) 103181

Yi Zhong[1], Ying Meng[1], Xi Xu, Lulu Zhao, Zhiyu Li, Qidong You, Jinlei Bian

State Key Laboratory of Natural Medicines and Jiangsu Key Laboratory of Drug Design and Optimization, China Pharmaceutical University, Nanjing 210009, China
Department of Medicinal Chemistry, School of Medicinal Chemistry, China Pharmaceutical University, Nanjing 210009, China



Synthesis of novel (*R*)-4-fluorophenyl-1*H*-1,2,3-triazoles: A new class of a-glucosidase inhibitors

Bioorganic Chemistry 91 (2019) 103182

Satya Kumar Avula[a], Ajmal Khan[a], Sobia Ahsan Halim[a], Zahra Al-Abri[a], Muhammad U. Anwar[a], Ahmed Al-Rawahi[a], Rene Csuk[b], Ahmed Al-Harrasi[a]

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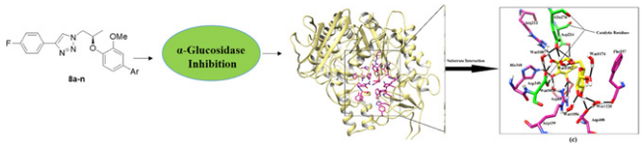

Synthesis, in silico and in vitro studies of new 1,4-dihydropiridine derivatives for antitumor and P-glycoprotein inhibitory activity

Bioorganic Chemistry 91 (2019) 103156

Shirin Mollazadeh[a,b], Amirhossein Sahebkar[b,c,d], Fatemeh Kalalinia[b], Javad Behravan[a,b], Farzin Hadizadeh[a,b]

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[b]Biotechnology Research Center, Pharmaceutical Technology Institute, Mashhad University of Medical Sciences, Mashhad, Iran
[c]Neurogenic Inflammation Research Center, Mashhad University of Medical Sciences, Mashhad, Iran
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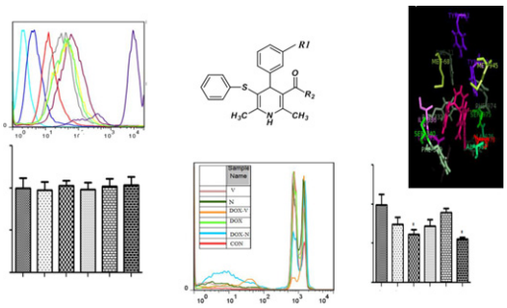

Bis-coumarins; non-cytotoxic selective urease inhibitors and antiglycation agents

Bioorganic Chemistry 91 (2019) 103170

Uzma Salar[a,b], Arsalan Nizamani[a], Fizza Arshad[a], Khalid Mohammed Khan[a,e], Muhammed Imran Fakhri[a], Shahnaz Perveen[c], Nessar Ahmed[d], M. Iqbal Choudhary[a,b,f]

[a]H. E. J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Karachi 75270, Pakistan
[b]Dr. Panjwani Center for Molecular Medicine and Drug Research, International Center for Chemical and Biological Sciences, University of Karachi, Karachi 75270, Pakistan
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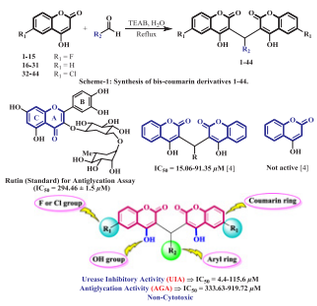

cAMPS derivatives. A minireview over synthetic medicinal chemistry

Bioorganic Chemistry 91 (2019) 103152

Kjell Undheim

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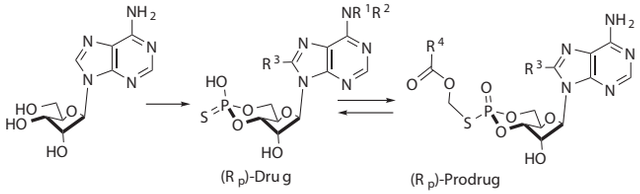

Discovery of Michael acceptor containing 1,4-dihydropyridines as first covalent inhibitors of L-/T-type calcium channels

Bioorganic Chemistry 91 (2019) 103187

Hande Aygün Cevher[a], David Schaller[b], Maria A. Gandini[c], Ozan Kaplan[d], Eder Gambeta[c], Fang Xiong Zhang[c], Mustafa Çelebier[d], Muhammad Nawaz Tahir[e], Gerald W. Zamponi[c], Gerhard Wolber[b], Miyase Gözde Gündüz[a]

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[d]Department of Analytical Chemistry, Faculty of Pharmacy, Hacettepe University, 06100 Sihhiye, Ankara, Turkey
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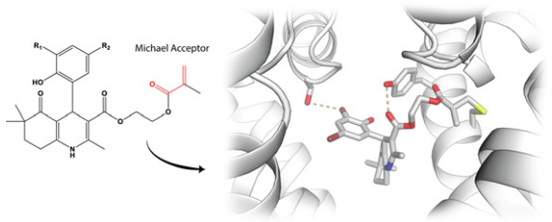

A combined experimental and computational study on peptide nucleic acid (PNA) analogues of tumor suppressive miRNA-34a

Bioorganic Chemistry 91 (2019) 103165

Valerio Piacenti[a,1], Emma Langella[b,1], Ida Autiero[b], John C. Nolan[c], Olga Piskareva[c], Mauro F.A. Adamo[a], Michele Saviano[d], Maria Moccia[d]

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[c]RCSI, Dept. of Cancer Genetics, York Street, Dublin 2, Ireland
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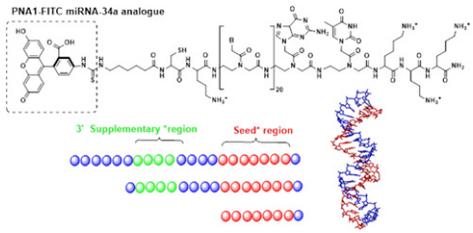

Discovery of novel cage-like heterocyclic hybrids as anti-inflammatory agents through the inhibition of nitrite, PGE2 and TNF-a

Bioorganic Chemistry 91 (2019) 103180

Raju Suresh Kumar[a,1], Paulrayer Antonisamy[b,1], Abdulrahman I. Almansour[a], Natarajan Arumugam[a], Dhaifallah M. Al-thamili[a], Raju Ranjith Kumar[c], Ha-Rim Kim[b], Kang-Beom Kwon[b]

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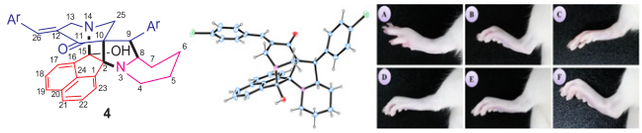
[b]Department of Korean Physiology, Wonkwang University School of Korean Medicine, 460 Iksan-daero, Iksan City, Jeonbuk 570-749, Republic of Korea
[c]Department of Organic Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai 625 021, Tamil Nadu, India



1,8-Substituted anthraquinones, anthrones and bianthrones as potential non-azole leads against fungal infections

Bioorganic Chemistry 91 (2019) 103151

Murhaf Jalab[a], Megan E. Critchley[b], Charlotte M. Taylor[b], Clare L. Lawrence[a], Robert B. Smith[b]

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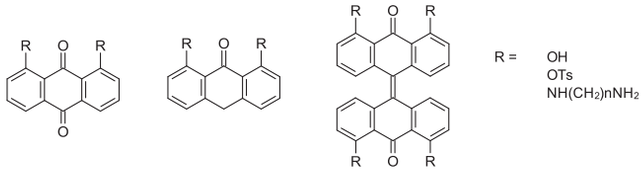
[b]Chemistry, School of Physical Sciences and Computing, University of Central Lancashire, Preston PR1 2HE, UK



Three new cyclopiane-type diterpenes from a deep-sea derived fungus *Penicillium* sp. YPGA11 and their effects against human esophageal carcinoma cells

Bioorganic Chemistry 91 (2019) 103129

Zhongbin Cheng[a,c], Yuanli Li[a], Wei Xu[b], Wan Liu[a], Lijun Liu[a], Daigui Zhu[a], Ying Kang[d], Zhuhua Luo[b], Qin Li[a,c]

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[b]Key Laboratory of Marine Biogenetic Resources, Third Institute of Oceanography, Ministry of Natural Resources, Xiamen 361005, China
[c]Eucommia Ulmoides Cultivation and Utilization of Henan Engineering Laboratory, Kaifeng 475004, China
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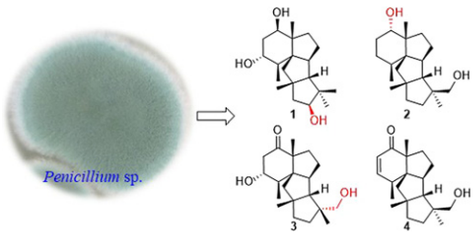
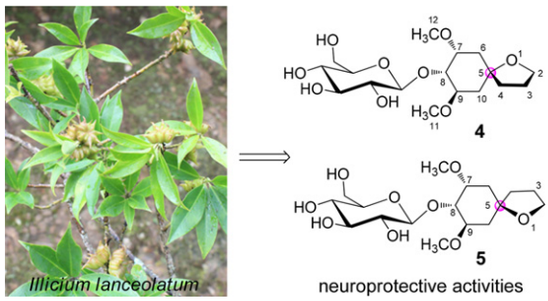


New hexalactone derivatives and a pair of new oxaspiro-carbon epimeric glycosides from the fruits of *Illicium lanceolatum*

Bioorganic Chemistry 91 (2019) 103113

Yang-Lan Liu[1], Xiao-Jing Wang[1], Ru-Bing Wang, Mi Li, Wen-Rui Li, Jian-Pei Zhang, Xiu-Qi Bao, Dan Zhang, Shuang-Gang Ma

State Key Laboratory of Bioactive Substance and Function of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences and Peking Union Medical College, Beijing 100050, China



FtsZ inhibitors as a new genera of antibacterial agents

Bioorganic Chemistry 91 (2019) 103169

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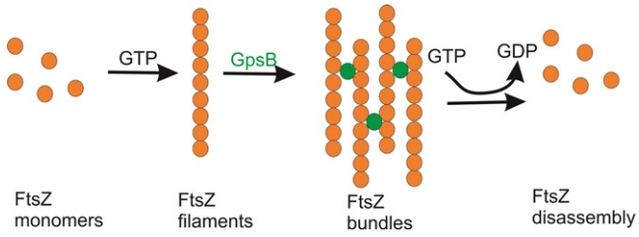

Small molecule HDAC inhibitors: Promising agents for breast cancer treatment

Bioorganic Chemistry 91 (2019) 103184

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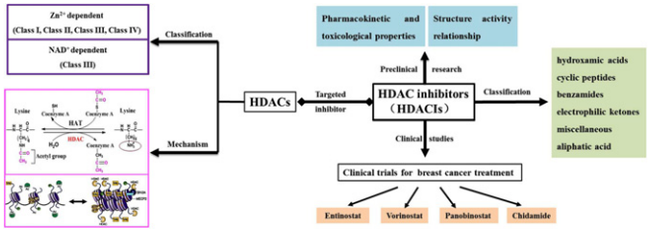

The influence of cationic dendrimers on antibacterial activity of phage endolysin against *P. aeruginosa* cells

Bioorganic Chemistry 91 (2019) 103121

Karol Ciepluch[a], Barbara Maciejewska[b], Katarzyna Galczynska[a], Dorota Kuc-Ciepluch[a], Maria Bryszewska[c], Dietmar Appelhans[d], Zuzanna Drulis-Kawa[b], Michal Arabski[a]

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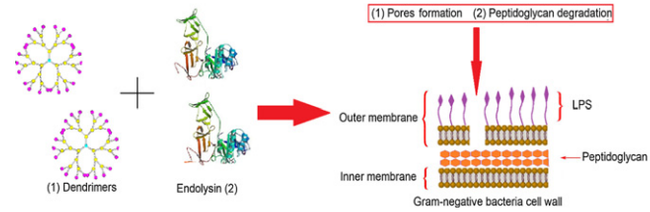

Chalcone derivatives and their antibacterial activities: Current development

Bioorganic Chemistry 91 (2019) 103133

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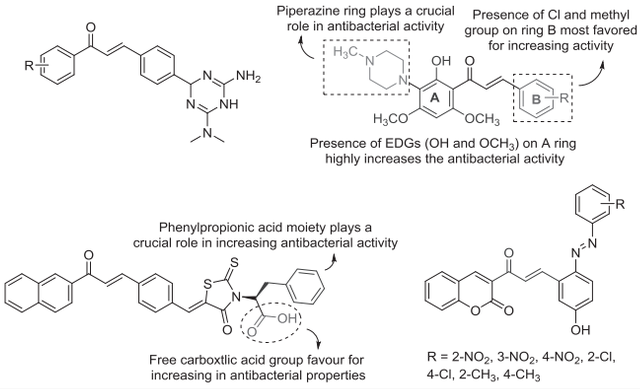

Design, synthesis and antibacterial activity evaluation of moxifloxacin-amide-1,2,3-triazole-isatin hybrids

Bioorganic Chemistry 91 (2019) 103162

Feng Gao[a,b], Lei Ye[a], Fangong Kong[a], Gang Huang[b], Jiaqi Xiao[a,b]

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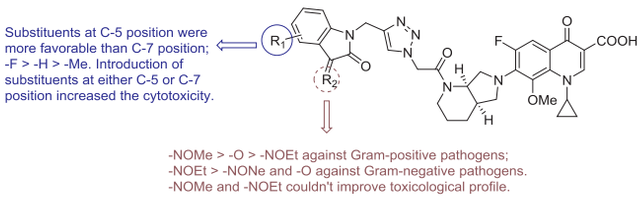

Anti-inflammatory spiroaxane and drimane sesquiterpenoids from *Talaromyces minioluteus* (*Penicillium minioluteum*)

Bioorganic Chemistry 91 (2019) 103166

Chunmei Chen[1], Weiguang Sun[1], Xiaorui Liu, Mengsha Wei, Yu Liang, Jianping Wang, Hucheng Zhu, Yonghui Zhang

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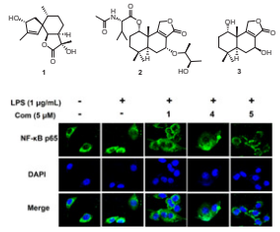

Genetic dereplication of *Trichoderma hypoxylon* reveals two novel polycyclic lactones

Bioorganic Chemistry 91 (2019) 103185

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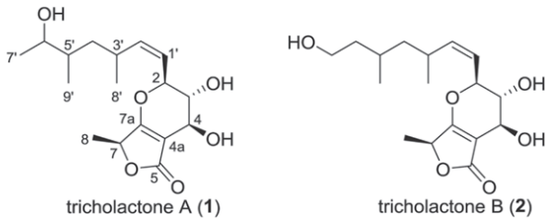

Multi-target 1,4-dihydropyridines showing calcium channel blockade and antioxidant capacity for Alzheimer's disease therapy

Bioorganic Chemistry 91 (2019) 103205

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