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REGULAR ARTICLES

Aminonaphthalimide hybrids of mitoxantrone and amonafide as anticancer and fluorescent cellular imaging agents

Bioorganic Chemistry 93 (2019) 103287

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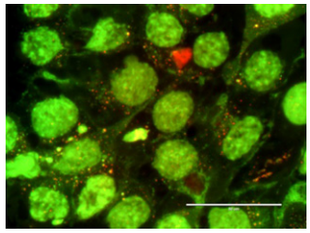

Adapalene inhibits ovarian cancer ES-2 cells growth by targeting glutamic-oxaloacetic transaminase 1

Bioorganic Chemistry 93 (2019) 103315

Qiqi Wang[b], Qingzhe Zhang[a], Shanshan Luan[a], Kaiyin Yang[a], Mengzhu Zheng[a], Kezhen Li[c], Lixia Chen[b], Hua Li[a]

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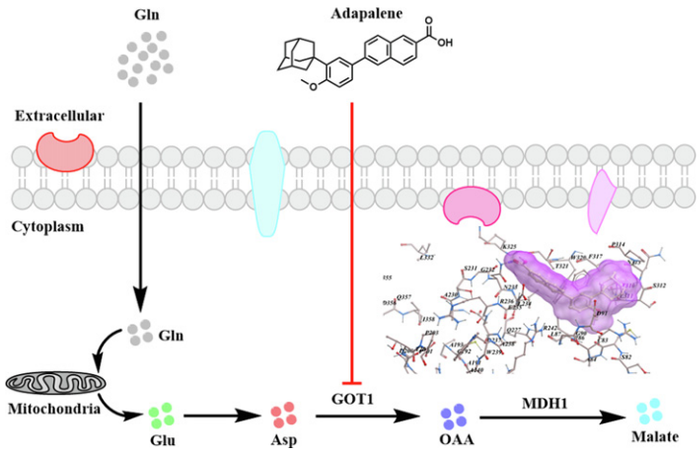
[c]*Cancer Biology Center, Tongji Hospital, Tongji Medical College, Huazhong University of Science and Technology, Wuhan 430030, China*



Synthesis of novel nitroreductase enzyme-activated nitric oxide prodrugs to site-specifically kill bacteria

Bioorganic Chemistry 93 (2019) 103318

Hailey A.J. Hibbard[a], Melissa M. Reynolds[a,b]

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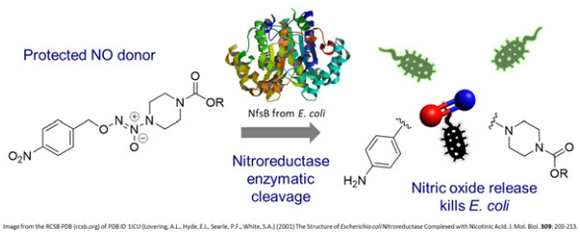

Design and synthesis of substituted dihydropyrimidinone derivatives as cytotoxic and tubulin polymerization inhibitors

Bioorganic Chemistry 93 (2019) 103317

Sravani Sana[a], Ramya Tokala[a], Deepti Madanlal Bajaj[b], Narayana Nagesh[d], Kiran Kumar Bokara[d], Gaddam Kiranmai[d], Uppu Jaya Lakshmi[a], Swapna Vadlamani[c], Venu Talla[b], Nagula Shankaraiah[a]

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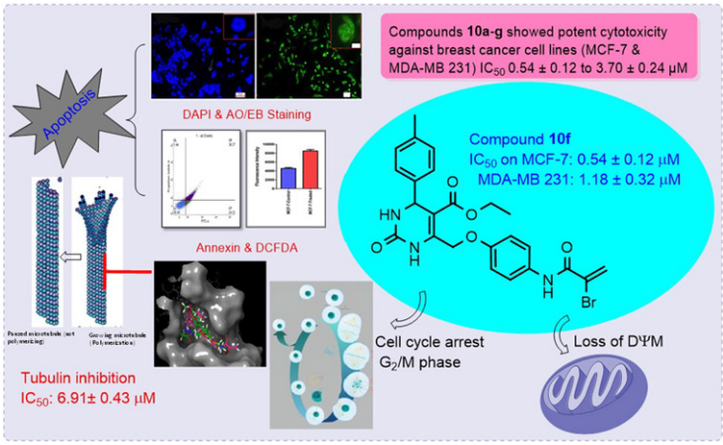

Synthesis and anti-tyrosinase mechanism of the substituted vanillyl cinnamate analogues

Bioorganic Chemistry 93 (2019) 103316

Zefeng Zhao[a], Guangxin Liu[b], Yufeng Meng[a], Jiale Tian[a], Xufei Chen[a], Meilun Shen[b], Yuexuan Li[a], Bingyao Li[a], Cong Gao[a], Shaoping Wu[a], Cuiqin Li[b], Xirui He[c], Ru Jiang[d], Mingcheng Qian[e,f], Xiaohui Zheng[a]

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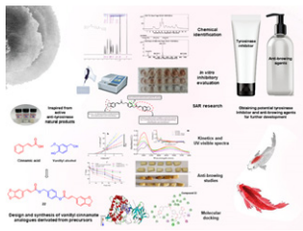

Design, synthesis and preliminary *in-vitro* studies of novel boronated monocarbonyl analogues of Curcumin (BMAC) for antitumor and ß-amiloyd disaggregation activity

Bioorganic Chemistry 93 (2019) 103324

Emanuele Azzi[a], Diego Alberti[b], Stefano Parisotto[a], Alberto Oppedisano[a], Nicoletta Protti[c,d], Saverio Altieri[c,d], Simonetta Geninatti-Crich[b], Annamaria Deagostino[a]

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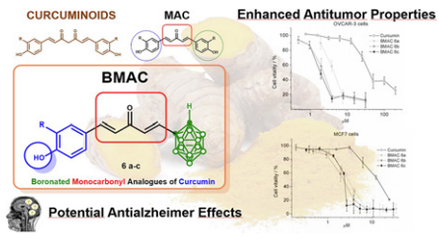

Design, synthesis and biological evaluation of novel copper-chelating acetylcholinesterase inhibitors with pyridine and *N*-benzylpiperidine fragments

Bioorganic Chemistry 93 (2019) 103322

Yeheng Zhou[a,d], Wei Sun[a], Jiale Peng[d], Hui Yan[a], Li Zhang[d], Xingyong Liu[d], Zhili Zuo[a,b,c,d]

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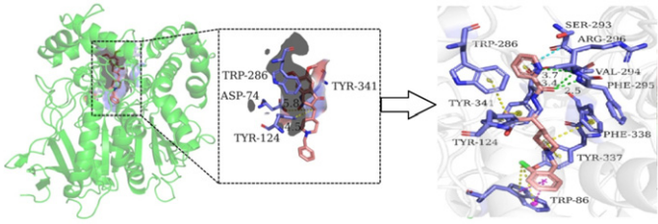

Design, synthesis and biological evaluation of some new 1,3,4-thiadiazine-thiourea derivatives as potential antitumor agents against non-small cell lung cancer cells

Bioorganic Chemistry 93 (2019) 103323

Fatma A.F. Ragab[a], Salah A. Abdel-Aziz[b], Marwa Kamel[c], Abdelsalam Mohamed A. Ouf[b], Heba Abdelrasheed Allam[a]

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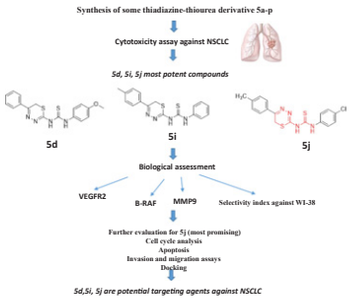

Identification of a potent and selective gametocytocidal antimalarial agent from the stem barks of *Lophira lanceolata*

Bioorganic Chemistry 93 (2019) 103321

Annalisa Lopatriello[a], Harouna Soré[b], Annette Habluetzel[c], Silvia Parapini[d], Sarah D'Alessandro[d], Donatella Taramelli[e], Orazio Taglialatela-Scafati[a]

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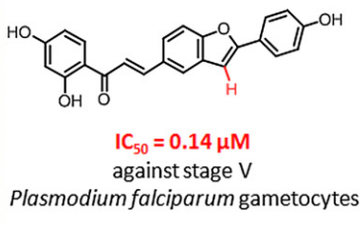
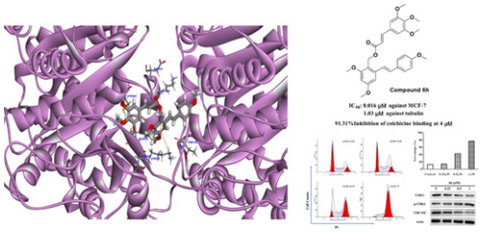


Design, synthesis and biological evaluation of resveratrol-cinnamoyl derivates as tubulin polymerization inhibitors targeting the colchicine binding site

Bioorganic Chemistry 93 (2019) 103319

Yong Yin, Bao-Ping Lian, Yuan-Zheng Xia, Yu-Ying Shao, Ling-Yi Kong

Jiangsu Key Laboratory of Bioactive Natural Product Research and State Key Laboratory of Natural Medicines, Department of Natural Medicinal Chemistry, School of Traditional Chinese Pharmacy, China Pharmaceutical University, 24 Tong Jia Xiang, Nanjing 210009, People's Republic of China



Exploration of Pd-catalysed four-component tandem reaction for one-pot assembly of pyrazolo[1,5-*c*]quinazolines as potential EGFR inhibitors

Bioorganic Chemistry 93 (2019) 103314

Arshad J. Ansari[a], Gaurav Joshi[b], Umesh Prasad Yadav[c], Antim K. Maurya[d], Vijai K. Agnihotri[d], Sourav Kalra[c], Raj Kumar[b], Sandeep Singh[c], Devesh M. Sawant[a]

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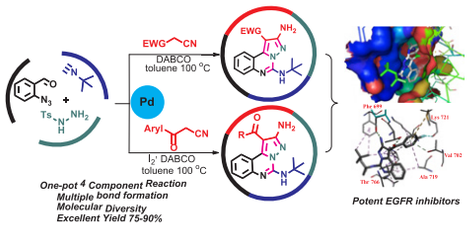

Novel tribenzylaminobenzolsulphonylimine based on their pyrazine and pyridazines: Synthesis, characterization, antidiabetic, anticancer, anticholinergic, and molecular docking studies

Gulnar Mamedova[a], Adila Mahmudova[a], Sabir Mamedov[a], Yavuz Erden[b], Parham Taslimi[c], Burak Tüzün[d], Recep Tas[c], Vagif Farzaliyev[a], Afsun Sujayev[a], Saleh H. Alwasel[e], Ilhami Gulçin[f]

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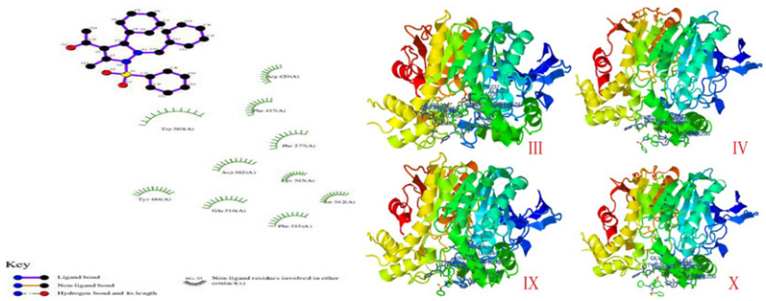
Bioorganic Chemistry 93 (2019) 103313



Design, synthesis, in vitro and in vivo evaluation of novel pyrrolizine-based compounds with potential activity as cholinesterase inhibitors and anti-Alzheimer's agents

Nehad Abou-Elmagd El-Sayed[a], Awatef El-Said Farag[a], Manal Abdel Fattah Ezzat[a], Hulya Akincioglu[b], Ilhami Gülçin[c], Sahar Mahmoud Abou-Seri[a]

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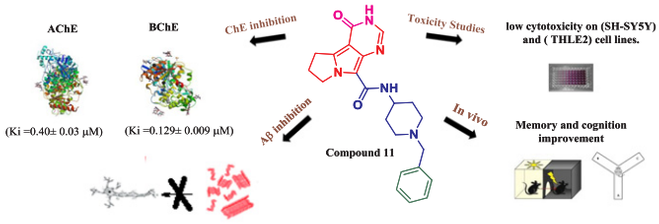

The antiproliferative effect of spectinabilins from *Streptomyces spectabilis* on hepatocellular carcinoma cells *in vitro* and *in vivo*

Xiaoxiao Gao[a], Hongzhi Yao[a], Yu Mu[a], Peipei Guan[a], Guiding Li[b], Bin Lin[c], Yi Jiang[b], Li Han[a], Xueshi Huang[a], Chenglin Jiang[b]

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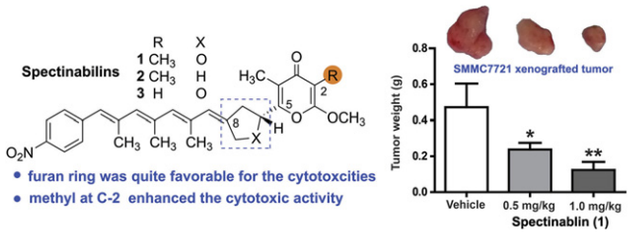
[c]*School of Pharmaceutical Engineering, Shenyang Pharmaceutical University, Shenyang 110016, People's Republic of China*

Bioorganic Chemistry 93 (2019) 103311



Design, synthesis, biological evaluation, and molecular modeling studies of quinoline-ferulic acid hybrids as cholinesterase inhibitors

Bioorganic Chemistry 93 (2019) 103310

Jun Mo[b], Hongyu Yang[b], Tingkai Chen[c], Qihang Li[b], Hongzhi Lin[b], Feng Feng[c,f], Wenyuan Liu[d], Wei Qu[c], Qinglong Guo[e], Heng Chi[f], Yao Chen[a], Haopeng Sun[b,f]

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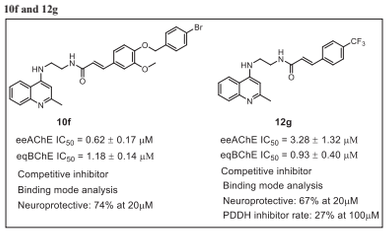

Discovery of novel oxoindolin derivatives as atypical dual inhibitors for DNA Gyrase and FabH

Bioorganic Chemistry 93 (2019) 103309

Yu-Shun Yang[a], Mi-Mi Su[a], Jian-Fei Xu[a], Qi-Xing Liu[a], Li-Fei Bai[c], Xiao-Wei Hu[b], Hai-Liang Zhu[a]

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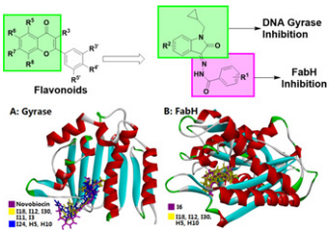

A mass spectrometric stochastic dynamic diffusion approach to selective quantitative and 3D structural analyses of native cyclodextrins by electrospray ionization and atmospheric pressure chemical ionization methods

Bioorganic Chemistry 93 (2019) 103308

Bojidarka Ivanova, Michael Spiteller

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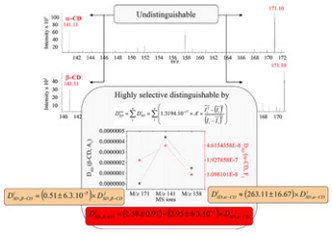

Design, synthesis, molecular modelling, ADME prediction and anti-hyperglycemic evaluation of new pyrazole-triazolopyrimidine hybrids as potent a-glucosidase inhibitors

Bioorganic Chemistry 93 (2019) 103307

Vinay Pogaku[a], Kiran Gangarapu[b], Srinivas Basavoju[a], Kiran Kumar Tatapudi[c], Suresh Babu Katragadda[c]

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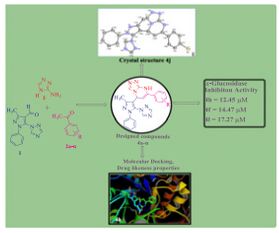

Facile synthesis of 1,2,3-triazole-fused indolo- and pyrrolo [1,4] diazepines, DNA-binding and evaluation of their anticancer activity

Bioorganic Chemistry 93 (2019) 103306

Jitendra Gour[a], Srikanth Gatadi[a], Venkatesh Pooladanda[b], Shaik Mahammad Ghouse[a], Satyaveni Malasala[a], Y.V. Madhavi[a], Chandraiah Godugu[b], Srinivas Nanduri[a]

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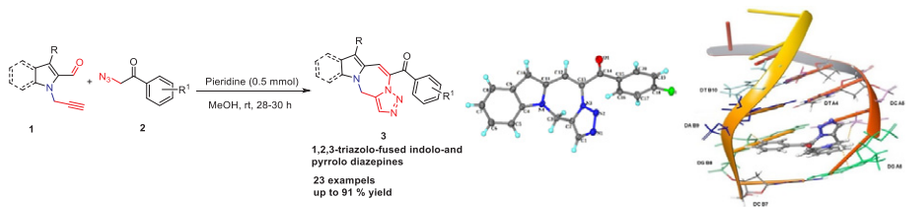

Exploring calixarene-based clusters for efficient functional presentation of *Streptococcus pneumoniae* saccharides

Bioorganic Chemistry 93 (2019) 103305

Marta Giuliani[a], Federica Faroldi[a], Laura Morelli[b], Enza Torre[c], Grazia Lombardi[c], Silvia Fallarini[c], Francesco Sansone[a], Federica Compostella[b]

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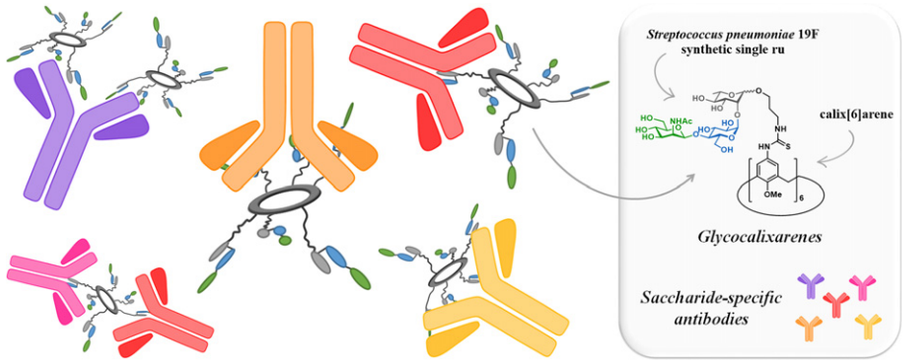

Chiral resolution of a caged xanthone and evaluation across a broad spectrum of breast cancer subtypes

Bioorganic Chemistry 93 (2019) 103303

Oraphin Chantarasriwong[a,b], Tanis J. Dorwart[c], Theodore Habarth Morales[c], Stephanie F. Maggio[c], Aspen L. Settle[c], Andrew T. Milcarek[d], Mary L. Alpaugh[d], Maria A. Theodoraki[c], Emmanuel A. Theodorakis[a]

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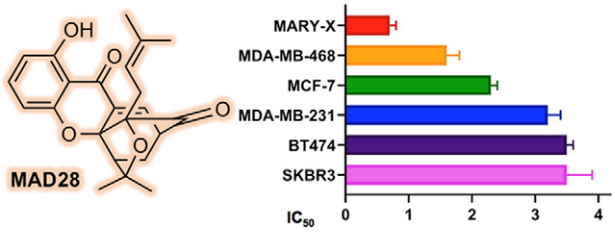

Design, synthesis and biological evaluation of flexible and rigid analogs of 4*H*-1,2,4-triazoles bearing 3,4,5-trimethoxyphenyl moiety as new antiproliferative agents

Bioorganic Chemistry 93 (2019) 103300

Mahsa Ansari[a], Mohammad Shokrzadeh[b], Saeed Karima[c], Shima Rajaei[c], Seyedeh Mahdieh Hashemi[d], Hassan Mirzaei[a], Marjan Fallah[b], Saeed Emami[d]

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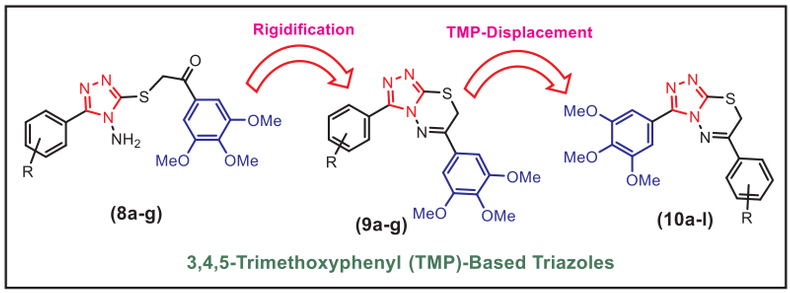

Microwave synthesis of novel halogenated ß-enaminonitriles linked 9-bromo-1*H*-benzo[*f*]chromene moieties: Induces cell cycle arrest and apoptosis in human cancer cells via dual inhibition of topoisomerase I and II

Bioorganic Chemistry 93 (2019) 103289

Ahmed M. Fouda[a], Mohammed A. Assiri[a], Ahmed Mora[b], Tarik E. Ali[a,c], Tarek H. Afifi[d], Ahmed M. El-Agrody[b]

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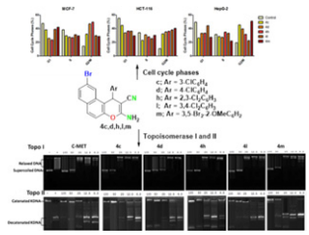
[b]*Chemistry Department, Faculty of Science, Al-Azhar University, Cairo 11884, Egypt*
[c]*Department of Chemistry, Faculty of Education, Ain Shams University, Roxy, Cairo, Egypt*
[d]*Chemistry Department, Faculty of Science, Taibah University, Al-Madinah Al-Munawarah 30002, Saudi Arabia*

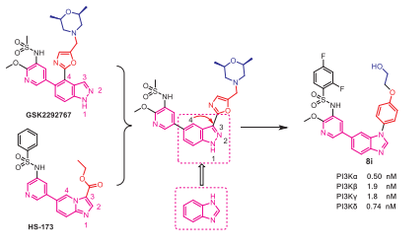


Design, synthesis and evaluation of some 1,6-disubstituted-*1H*-benzo[*d*]imidazoles derivatives targeted PI3K as anticancer agents

Bioorganic Chemistry 93 (2019) 103283

Huai-Wei Ding[a], Lu Yu[b], Meng-xuan Bai[a], Xiao-Chun Qin[b], Man-tong Song[c], Qing-Chun Zhao[b]

[a]*Key Laboratory of Structure-Based Drug Design and Discovery, Ministry of Education, Shenyang Pharmaceutical University, Shenyang 110016, China*
[b]*School of Traditional Chinese Materia Medica, Shenyang Pharmaceutical University, Shenyang 110016, China*
[c]*School of Public Health, Shenyang Medical College, Shenyang 110034, China*

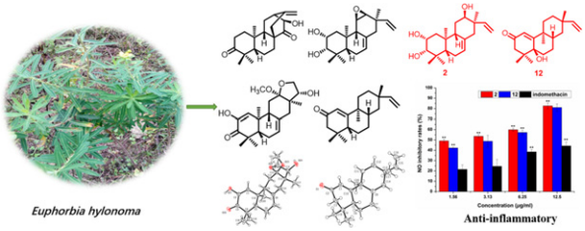


Anti-inflammatory evaluation and structure-activity relationships of diterpenoids isolated from *Euphorbia hylonoma*

Bioorganic Chemistry 93 (2019) 103256

Wen-Jun Wei[a], Weiyan Qi[b], Xin-Mei Gao[b], Ke-Na Feng[c], Kai-Liang Ma[a], Hang-Ying Li[a], Ya Li[a], Kun Gao[a]

[a]*State Key Laboratory of Applied Organic Chemistry, College of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou 730000, People's Republic of China*
[b]*Department of Marine Pharmacy, School of Life Science and Technology, China Pharmaceutical University, Nanjing 211198, People's Republic of China*
[c]*State Key Laboratory of Phytochemistry and Plant Resources in West China, and Yunnan Key Laboratory of Natural Medicinal Chemistry, Kunming Institute of Botany, Chinese Academy of Sciences, Kunming 650201, People's Republic of China*

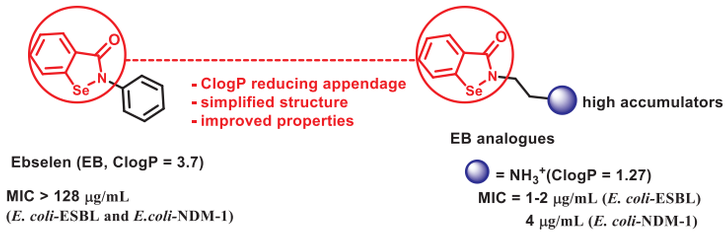


Ebselen bearing polar functionality: Identification of potent antibacterial agents against multidrug-resistant Gram-negative bacteria

Cheng Chen, Kewu Yang

Key Laboratory of Synthetic and Natural Functional Molecule Chemistry of Ministry of Education, Chemical Biology Innovation Laboratory, College of Chemistry and Materials Science, Northwest University, 1 Xuefu Avenue, Xi'an 710127, PR China

Bioorganic Chemistry 93 (2019) 103286

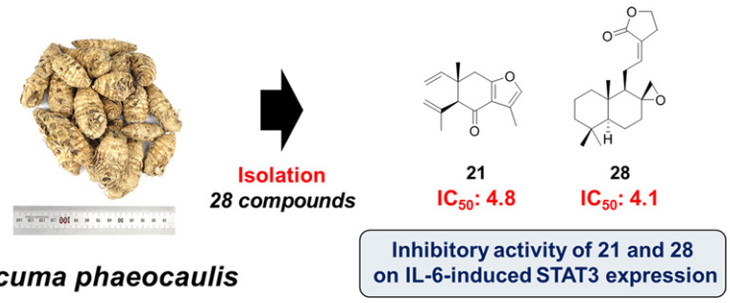


STAT3-inhibitory activity of sesquiterpenoids and diterpenoids from *Curcuma phaeocaulis*

Hyun-Jae Jang, Hyung-Jin Lim, Eun-Jae Park, Seung-Jae Lee, Soyoung Lee, Seung Woong Lee, Mun-Chual Rho

Immunoregulatory Materials Research Center, Korea Research Institute of Bioscience and Biotechnology, 181 Ipsin-gil, Jeongeup-si, Jeonbuk 56212, Republic of Korea

Bioorganic Chemistry 93 (2019) 103267

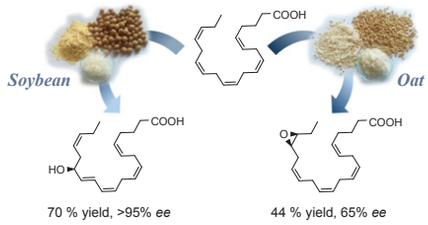


Lyophilized extracts from vegetable flours as valuable alternatives to purified oxygenases for the synthesis of oxylipins

Claudia Sanfilippo, Angela Paterna, Daniela M. Biondi, Angela Patti

CNR – Istituto di Chimica Biomolecolare, Via Paolo Gaifami 18, I-95126 Catania, Italy

Bioorganic Chemistry 93 (2019) 103325

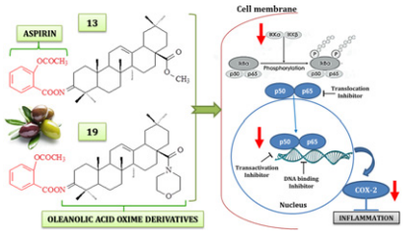


Oleanolic acid oxime derivatives and their conjugates with aspirin modulate the NF-?B-mediated transcription in HepG2 hepatoma cells

Violetta Krajka-Kuźniak[a], Barbara Bednarczyk-Cwynar[b], Jarosław Paluszczak[a], Hanna Szaefer[a], Maria Narozna[a], Lucjusz Zaprutko[b], Wanda Baer-Dubowska[a]

[a]*Department of Pharmaceutical Biochemistry, Poznan University of Medical Sciences, Swiecickiego 4, 60-781 Poznan, Poland*
[b]*Department of Organic Chemistry Poznan University of Medical Sciences, Grunwaldzka 6, 60-780 Poznan, Poland*

Bioorganic Chemistry 93 (2019) 103326

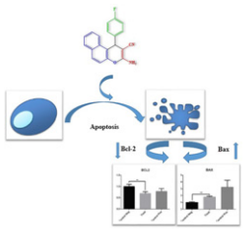


Synthesis, characterization, anti-proliferative properties and DNA binding of benzochromene derivatives: Increased Bax/Bcl-2 ratio and caspase-dependent apoptosis in colorectal cancer cell line

Bioorganic Chemistry 93 (2019) 103329

Mina Hanifeh Ahagh[a], Gholamreza Dehghan[a], Maryam Mehdipour[a], Reza Teimuri-Mofrad[b], Elmira Payami[b], Nader Sheibani[c], Maryam Ghaffari[a], Milad Asadi[d]

[a]*Department of Biology, Faculty of Natural Sciences, University of Tabriz, Tabriz, Iran*
[b]*Department of Organic and Biochemistry, Faculty of Chemistry, University of Tabriz, Tabriz, Iran*
[c]*Department of Ophthalmology and Visual Sciences, Cell and Regenerative Biology, and Biomedical Engineering, University of Wisconsin, School of Medicine and Public Health, Madison, WI, USA*
[d]*Immunology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran*

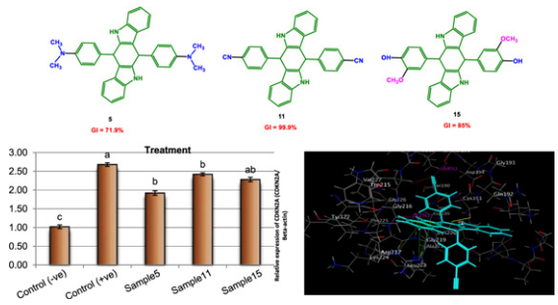


Towards breast cancer targeting: Synthesis of tetrahydroindolocarbazoles, antibreast cancer evaluation, uPA inhibition, molecular genetic and molecular modelling studies

Bioorganic Chemistry 93 (2019) 103332

Entesar M. Ahmed[a], Alaadin E. Sarhan[b], Dina H. El-Naggar[c], Reham R. Khattab[d], Mohamed El-Naggar[e], Shahenda M. El-Messery[f], Ghada S. Hassan[g], Marwa M. Mounier[h], Khaled Mahmoud[h], Neama I. Ali[i], Karima F. Mahrous[i], Mamdouh M. Ali[j], Mardia T. El Sayed[c]

[a]*Chemistry Department, Faculty of Science, Al-Azhar University (Girls Branch), Cairo, Egypt*
[b]*Therapeutical Chemistry Department, Pharmaceutical Division, National Research Centre, Dokki-12311, Egypt*
[c]*Department of Applied Organic Chemistry, National Research Centre, 12622 Dokki, Giza, Egypt*
[d]*Photochemistry Department, Chemical Industries Research Division, National Research Centre, Dokki 12311, Egypt*
[e]*Chemistry Department, Faculty of Sciences, University of Sharjah, Sharjah 27272, United Arab Emirates*
[f]*Department of Pharmaceutical Organic Chemistry, Faculty of Pharmacy, Mansoura University, 35516 Mansoura, Egypt*
[g]*Department of Medicinal Chemistry, Faculty of Pharmacy, Mansoura University, 35516 Mansoura, Egypt*
[h]*Pharmacognosy Department, National Research Centre, 12622-Dokki, Egypt*
[i]*Cell Biology Department, National Research Centre, 12622-Dokki, Egypt*
[j]*Biochemistry Department, National Research Centre, 12622-Dokki, Egypt*

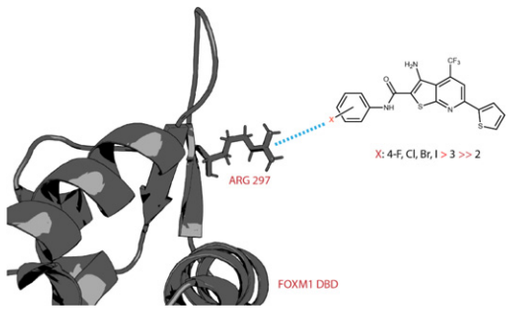


A structure-activity relationship study of Forkhead Domain Inhibitors (FDI): The importance of halogen binding interactions

Bioorganic Chemistry 93 (2019) 103269

Seyed Amirhossein Tabatabaei Dakhili, David J. Pérez, Keshav Gopal, Seyed Yasin Tabatabaei Dakhili, John R. Ussher, Carlos A. Velázquez-Martínez

Faculty of Pharmacy and Pharmaceutical Sciences, University of Alberta, Edmonton, AB, Canada

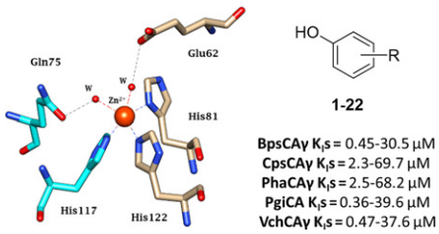


Extending the ?-class carbonic anhydrases inhibition profiles with phenolic compounds

Bioorganic Chemistry 93 (2019) 103336

Alessio Nocentini[a], Sameh M. Osman[b], Sonia Del Prete[c], Clemente Capasso[c], Zeid A. ALOthman[b], Claudiu T. Supuran[a,b]

[a]NEUROFARBA Department, Sezione di Scienze Farmaceutiche e Nutraceutiche, Università degli Studi di Firenze, Sesto Fiorentino (Firenze), Italy
[b]Chemistry Department, College of Science, King Saud University, P.O. Box 2455, Riyadh 11451, Saudi Arabia
[c]Istituto di Bioscienze e Biorisorse, CNR, Via Pietro Castellino 111, 80131 Napoli, Italy

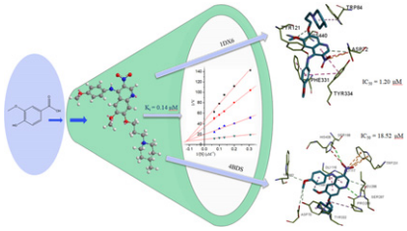


New 4-*N*-phenylaminoquinoline derivatives as antioxidant, metal chelating and cholinesterase inhibitors for Alzheimer's disease

Bioorganic Chemistry 93 (2019) 103328

Rong Cai[a], Li-Ning Wang[b], Jing-Jing Fan[a], Shang-Qi Geng[a], Yu-Ming Liu[a]

[a]Department of Pharmacy Engineering, Tianjin University of Technology, Tianjin 300384, PR China
[b]College of Traditional Chinese Medicine, Tianjin Univerisity of Traditional Chinese Medicine, Tianjin 300193, PR China

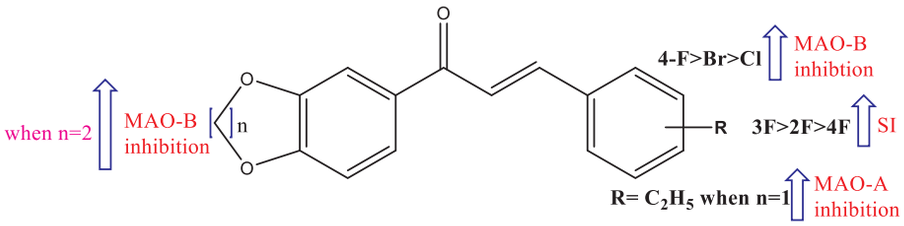


Design, synthesis and biological evaluation of oxygenated chalcones as potent and selective MAO-B inhibitors

Bioorganic Chemistry 93 (2019) 103335

Della Grace Thomas Parambi[a], Jong Min Oh[b], Seung Cheol Baek[b], Jae Pil Lee[b], Anna Rita Tondo[c], Orazio Nicolotti[d], Hoon Kim[b], Bijo Mathew[e]

[a]Department of Pharmaceutical Chemistry, Jouf University, Sakaka, Al Jouf 2014, Saudi Arabia
[b]Department of Pharmacy, and Research Institute of Life Pharmaceutical Sciences, Sunchon National University, Suncheon 57922, Republic of Korea
[c]Istituto di Ricerche Farmacologiche Mario Negri IRCCS, Via la Masa 19, 20156 Milano, Italy
[d]Dipartimento di Farmacia—Scienze del Farmaco, Università degli Studi di Bari "Aldo Moro", via E. Orabona, 4, I-70125 Bari, Italy
[e]Division of Drug Design and Medicinal Chemistry Research Lab, Department of Pharmaceutical Chemistry, Ahalia School of Pharmacy, Palakkad 678557, Kerala, India

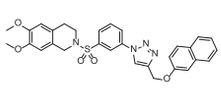


Novel triazole-tetrahydroisoquinoline hybrids as human aromatase inhibitors

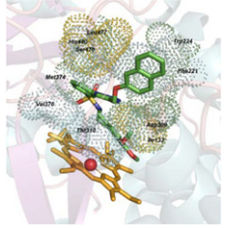
Bioorganic Chemistry 93 (2019) 103327

Chanamon Chamduang[a], Ratchanok Pingaew[a], Veda Prachayasittikul[b], Supaluk Prachayasittikul[b], Somsak Ruchirawat[c,d], Virapong Prachayasittikul[e]

[a]Department of Chemistry, Faculty of Science, Srinakharinwirot University, Bangkok 10110, Thailand
[b]Center of Data Mining and Biomedical Informatics, Faculty of Medical Technology, Mahidol University, Bangkok 10700, Thailand
[c]Laboratory of Medicinal Chemistry, Chulabhorn Research Institute, and Program in Chemical Biology, Chulabhorn Graduate Institute, Bangkok 10210, Thailand
[d]Center of Excellence on Environmental Health and Toxicology, Commission on Higher, Education (CHE), Ministry of Education, Thailand
[e]Department of Clinical Microbiology and Applied Technology, Faculty of Medical Technology, Mahidol University, Bangkok 10700, Thailand



Compound **2i**: aromatase inhibitory activity IC_{50} = 70 nM without affecting the normal cell line

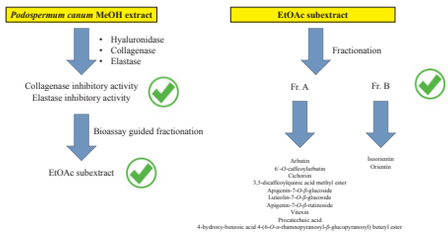


Inhibitory activity of *Podospermum canum* and its active components on collagenase, elastase and hyaluronidase enzymes

Bioorganic Chemistry 93 (2019) 103330

Özlem Bahadir Acikara[a], Mert Ilhan[b], Ekin Kurtul[a], Karel Šmejkal[d], Esra Küpeli Akkol[c]

[a]Department of Pharmacognosy, Faculty of Pharmacy, Ankara University, Tandogan, 06100 Ankara, Turkey
[b]Department of Pharmacognosy, Faculty of Pharmacy, Van Yüzüncü Yil University, Tusba 65080, Van, Turkey
[c]Department of Pharmacognosy, Faculty of Pharmacy, Gazi University, Etiler, 06330 Ankara, Turkey
[d]Department of Natural Drugs, Faculty of Pharmacy, University of Veterinary and Pharmaceutical Sciences Brno, Palackého tr. 1946/1, 61242 Brno, Czech Republic

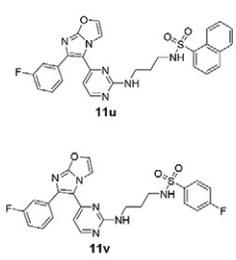


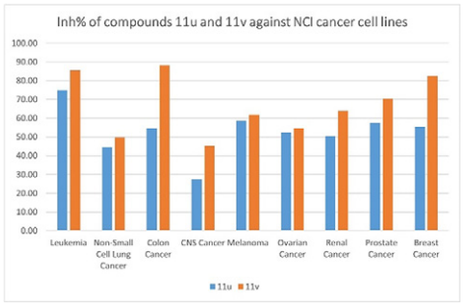
Design, synthesis, and anticancer activity of imidazo [2,1-*b*] oxazole-based RAF kinase inhibitors

Bioorganic Chemistry 93 (2019) 103349

Mohammed S. Abdel-Maksoud[a], Usama M. Ammar[b,c,d,e], Mohammed I. El-Gamal[f,g,h], Mahmoud M. Gamal El-Din[a], Karim I. Mersal[b,c,e], Eslam M.H. Ali[b,c,e], Kyung Ho Yoo[i], Kyung-Tae Lee[j,k], Chang-Hyun Oh[b,c]

[a]Medicinal & Pharmaceutical Chemistry Department, Pharmaceutical and Drug Industries Research Division, National Research Centre (NRC (ID: 60014618)), Dokki, Giza 12622, Egypt
[b]Center for Biomaterials, Korea Institute of Science & Technology (KIST School), Seoul, Seongbuk-gu 02792, Republic of Korea
[c]Department of Biomolecular Science, University of Science & Technology (UST), Daejeon, Yuseong-gu 34113, Republic of Korea
[d]Pharmaceutical Chemistry Department, Faculty of Pharmacy, Ahram Canadian University, Giza 12566, Egypt
[e]University of Science & Technology (UST), Daejeon, Yuseong-gu 34113, Republic of Korea
[f]Department of Medicinal Chemistry, College of Pharmacy, University of Sharjah, Sharjah 27272, United Arab Emirates
[g]Sharjah Institute for Medical Research, University of Sharjah, Sharjah 27272, United Arab Emirates
[h]Department of Medicinal Chemistry, Faculty of Pharmacy, University of Mansoura, Mansoura 35516, Egypt
[i]Chemical Kinomics Research Center, Korea Institute of Science and Technology, Seoul, Republic of Korea
[j]Department of Pharmaceutical Biochemistry, College of Pharmacy, Kyung Hee University, Seoul, Republic of Korea
[k]Department of Life and Nanopharmaceutical Science, College of Pharmacy, Kyung Hee University, Seoul, Republic of Korea



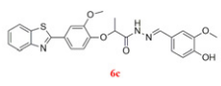


Novel 2-arylbenzothiazole DNA gyrase inhibitors: Synthesis, antimicrobial evaluation, QSAR and molecular docking studies

Bioorganic Chemistry 93 (2019) 103373

Iman A.Y. Ghannam[a], Eman A. Abd El-Meguid[a], Islam H. Ali[a], Donia H. Sheir[a], Ahmed M. El Kerdawy[b,c,d]

[a]Chemistry of Natural and Microbial Products Department, Pharmaceutical and Drug Industries Research Division, National Research Centre, Dokki, Cairo 12622, Egypt
[b]Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Cairo University, Kasr El-Aini Street, P.O. Box 11562, Cairo, Egypt
[c]Molecular Modeling Unit, Faculty of Pharmacy, Cairo University, Kasr El-Aini Street, P.O. Box 11562, Cairo, Egypt
[d]Department of Pharmaceutical Chemistry, Faculty of Pharmacy, New Giza University, Newgiza, km 22 Cairo-Alexandria Desert Road, Cairo, Egypt

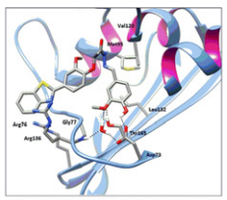


6c

E. coli DNA gyrase IC_{50} = 4.85 μM

E. faecalis, P. aeruginosa MIC = 1.02 μM

S. aureus, E. coli, K. pneumoniae, C. albicans MIC = 2.03 μM



3D representation of compound 6c showing its interactions with the ATP binding site of DNA gyrase B

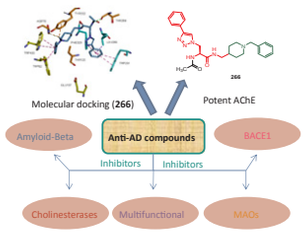
REVIEW ARTICLES

Critical evaluation of current Alzheimer's drug discovery (2018–19) & futuristic Alzheimer drug model approach

Bioorganic Chemistry 93 (2019) 103299

Atukuri Dorababu

Department of Studies in Chemistry, SRMPP Govt. First Grade College, Huvinahadagali 583219, Karnataka, India

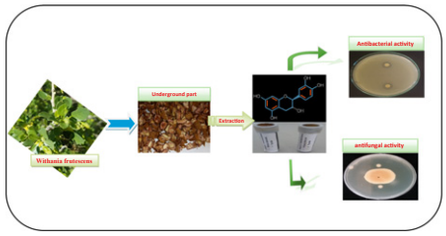


Antibacterial, antifungal and antioxidant activity of total polyphenols of *Withania frutescens.L*

Bioorganic Chemistry 93 (2019) 103337

Abdelfattah El Moussaoui[a], Fatima Zahra Jawhari[a], Ahmed M. Almehdi[e], Hicham Elmsellem[d], Kawtar Fikri Benbrahim[c], Dalila Bousta[b], Amina Bari[a]

[a]*Laboratory of Biotechnology and Conservation of Natural Resources, Faculty of Science Dhar El Mahraz, Fez, Morocco*
[b]*Laboratory of Neuroendocrinology and Nutritional and Climatic Environment, Faculty of Science Dhar El Mahraz, Fez, Morocco*
[c]*Laboratory of Biotechnology Microbial, Faculty of Science and Technology, Fez, Morocco*
[d]*Laboratory of Analytical Chemistry, Materials, and Environment (LC2AME), Faculty of Sciences, University of Mohammed Premier, B.P. 717, 60000 Oujda, Morocco*
[e]*Department of Chemistry, College of Sciences, University of Sharjah, PO Box: 27272, UAE*



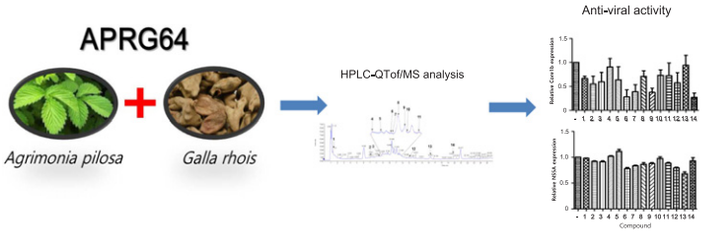
PRELIMINARY COMMUNICATIONS

Anti-viral activity of compounds from *Agrimonia pilosa* and *Galla rhois* extract mixture

Bioorganic Chemistry 93 (2019) 103320

Jeong Eun Kwon[a], Yeong-Geun Lee[a], Ji-Hun Kang[b], Yun-Feng Bai[c], Yong Joon Jeong[d], Nam-In Baek[a], Young-Jin Seo[b], Se Chan Kang[a]

[a]*Graduate School of Biotechnology and Department of Oriental Medicinal Biotechnology, Kyung Hee University, Yongin 17104, Republic of Korea*
[b]*Department of Life Science, Chung-Ang University, Seoul 06974, Republic of Korea*
[c]*Department of Integrative Medicine, The Fifth Medical Center, Chinese PLA General Hospital, Beijing 100039, China*
[d]*Genencell Co., Ltd, Yongin 16950, Republic of Korea*

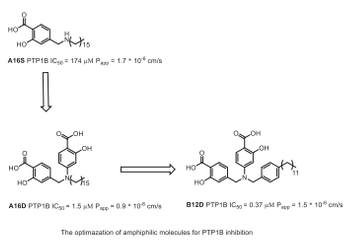


Identification of lipid-like salicylic acid-based derivatives as potent and membrane-permeable PTP1B inhibitors

Bioorganic Chemistry 93 (2019) 103296

Liang Li[a], Mojdeh S. Tavallaie[a], Fangzhou Xie[a], Yu Xia[b], Yaoyao Liang[a], Faqin Jiang[a], Lei Fu[a]

[a]*Shanghai Key Laboratory for Molecular Engineering of Chiral Drugs, School of Pharmacy, Shanghai Jiao Tong University (SJTU), 800 Dongchuan Road, Shanghai 200240, China*
[b]*Viva Biotech (Shanghai) Limited, Shanghai 201203, China*

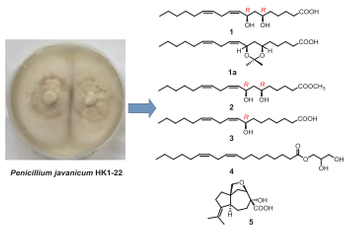


Two new unsaturated fatty acids from the mangrove rhizosphere soil-derived fungus *Penicillium javanicum* HK1-22

Bioorganic Chemistry 93 (2019) 103331

Zhao-Yang Liang[a,b,c], Nan-Xing Shen[a], Yao-Yao Zheng[a,b,c], Jin-Tao Wu[a], Li Miao[a], Xiu-Mei Fu[b], Min Chen[a], Chang-Yun Wang[b,c,d]

[a]Marine Science & Technology Institute, College of Environmental Science & Engineering, Yangzhou University, 196#, Huayang West Street, Yangzhou City, Jiangsu Province, People's Republic of China
[b]Key Laboratory of Marine Drugs, the Ministry of Education of China, School of Medicine and Pharmacy, Ocean University of China, Qingdao 266003, People's Republic of China
[c]Laboratory for Marine Drugs and Bioproducts, Qingdao National Laboratory for Marine Science and Technology, Qingdao 266237, People's Republic of China
[d]Institute of Evolution & Marine Biodiversity, Ocean University of China, Qingdao 266003, People's Republic of China



Phenylpropanoid and dibenzofuran derivatives from *Crataegus pinnatifida* with antiproliferative activities on hepatoma cells

Bioorganic Chemistry 93 (2019) 103354

Peng Zhao[a], Rui Guo[a], Yang-Yang Zhang[a], Hao Zhang[a], Guo-Dong Yao[a], Bin Lin[b], Xiao-Bo Wang[c], Xiao-Xiao Huang[a], Shao-Jiang Song[a]

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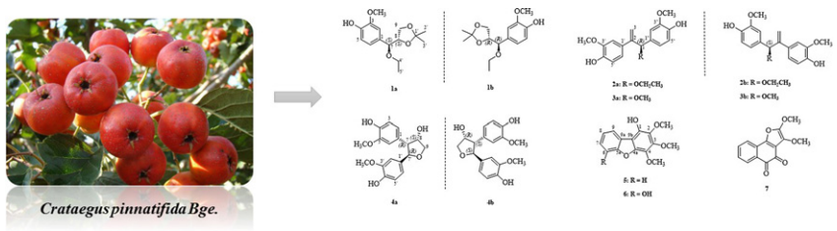
[b]School of Pharmaceutical Engineering, Shenyang Pharmaceutical University, Shenyang 110016, People's Republic of China
[c]Chinese People's Liberation Army Logistics Support Force No. 967 Hospital, Dalian 116021, People's Republic of China



SPECIAL ISSUE ON BIOCATALYSIS

Burkholderia cepacia lipase immobilization for hydrolytic reactions and the kinetic resolution of the non-equimolar mixtures of isomeric alcohols

Bioorganic Chemistry 93 (2019) 102745

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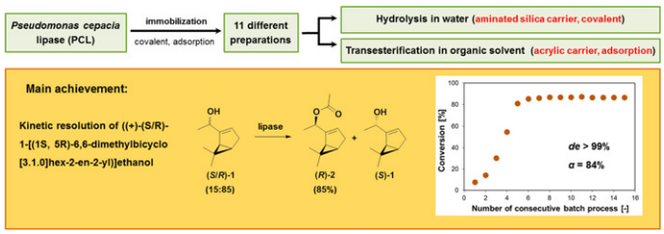

Bioconversion of xylose to xylonic acid via co-immobilized dehydrogenases for conjunct cofactor regeneration

Bioorganic Chemistry 93 (2019) 102747

Karolina Bachosz[a], Karol Synoradzki[b,c], Maciej Staszak[a], Manuel Pinelo[d], Anne S. Meyer[e], Jakub Zdarta[a,1], Teofil Jesionowski[a,2]

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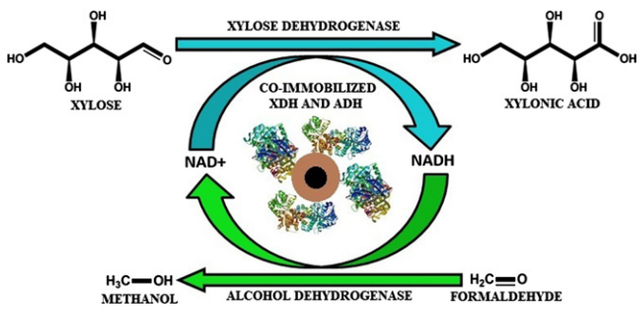

Regioselective *O*-glycosylation of flavonoids by fungi *Beauveria bassiana, Absidia coerulea* and *Absidia glauca*

Bioorganic Chemistry 93 (2019) 102750

Sandra Sordon, Jarosław Popłoński, Tomasz Tronina, Ewa Huszcza

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First biological conversion of chiral heterophosphonate derivative – Scaling and paths of conversion discussion

Bioorganic Chemistry 93 (2019) 102751

Ewa Żymańczyk-Duda[a], Natalia Dunal[a], Małgorzata Brzezińska-Rodak[a], Angelika Osiewała[a], Tomasz K. Olszewski[b], Magdalena Klimek-Ochab[a], Monika Serafin-Lewańczuk[a]

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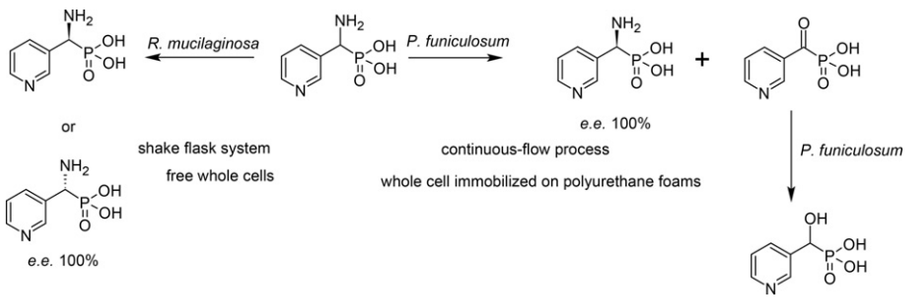

A facile lipase-catalyzed KR approach toward enantiomerically enriched homopropargyl alcohols

Bioorganic Chemistry 93 (2019) 102754

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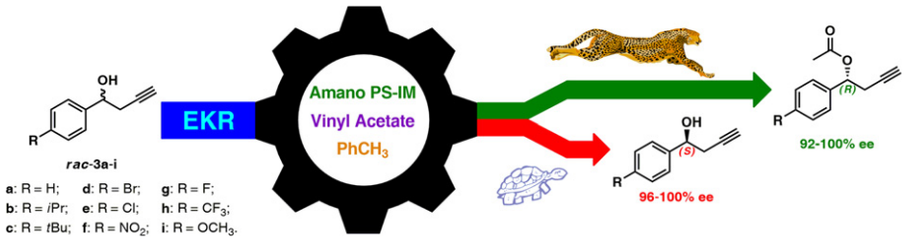

Fermentation parameters and conditions affecting levan production and its potential applications in cosmetics

Bioorganic Chemistry 93 (2019) 102787

Marta Domzał-Kędzia[a], Agnieszka Lewińska[b], Anna Jaromin[c], Marek Weselski[b], Robert Pluskota[d], Marcin Łukaszewicz[a]

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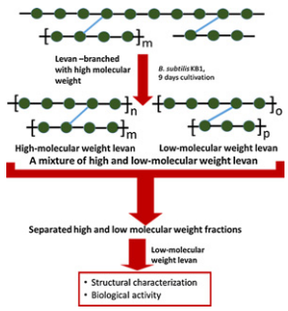

The possible mechanism of the formation of silver nanoparticles by *Penicillium cyclopium*

Bioorganic Chemistry 93 (2019) 102803

Ewelina Wanarska, Irena Maliszewska

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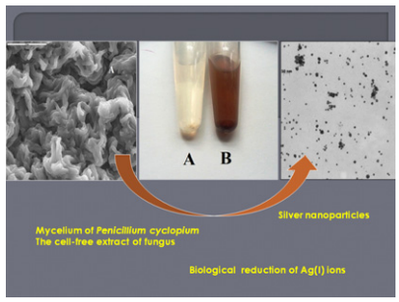

Determination of mechanisms of action of active carbons as a feed additive

Bioorganic Chemistry 93 (2019) 102804

Ewa Burchacka[a], Marcin Łukaszewicz[b], Marek Kułażyński[c]

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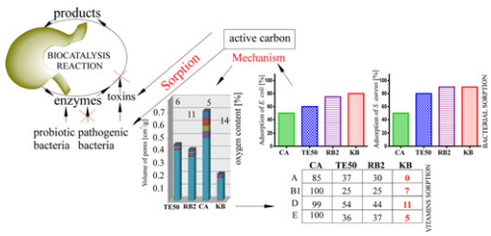

Reductive capabilities of different cyanobacterial strains towards acetophenone as a model substrate – Prospect of applications for chiral building blocks synthesis

Bioorganic Chemistry 93 (2019) 102810

Ewa Żymańczyk-Duda, Agata Głąb, Monika Górak, Magdalena Klimek-Ochab, Małgorzata Brzezińska-Rodak, Daniel Strub, Agnieszka Ślizewska

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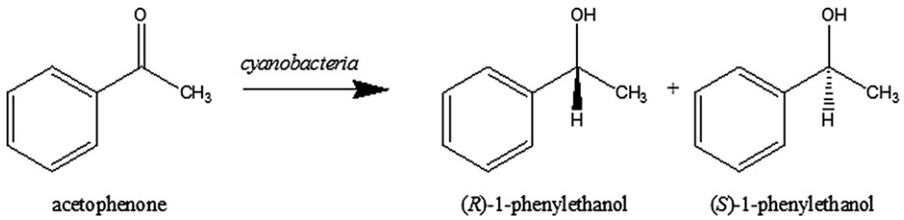

Hollow silica microspheres as robust immobilization carriers

Bioorganic Chemistry 93 (2019) 102813

Wojciech Snoch[a], Mateusz Tataruch[a], Olga Zastawny[b], Ewelina Cichon[c], Mathilde Gosselin[d], Hubert Cabana[e], Maciej Guzik[a]

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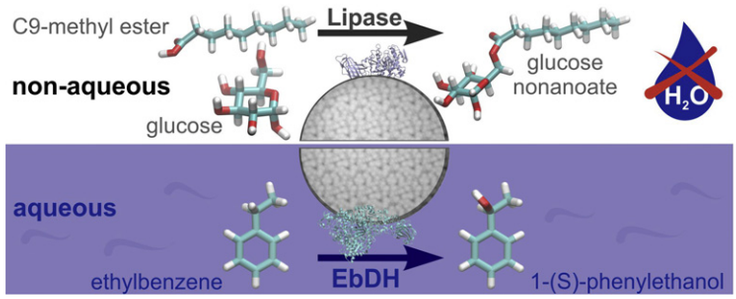

Synthesis of (*E*)-a,ß-unsaturated carboxylic esters derivatives from cyanoacetic acid *via* promiscuous enzyme-promoted cascade esterification/Knoevenagel reaction

Bioorganic Chemistry 93 (2019) 102816

Monika Wilk, Damian Trzepizur, Dominik Koszelewski, Anna Brodzka, Ryszard Ostaszewski

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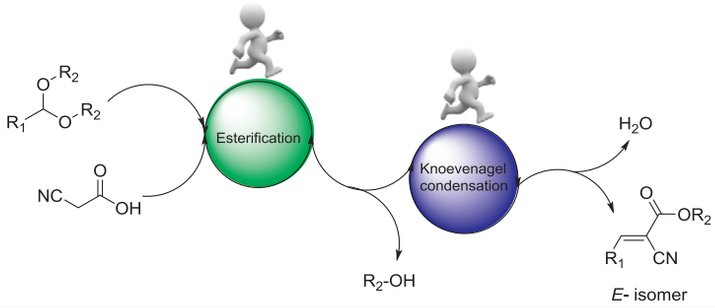

The influence of the isocyanoesters structure on the course of enzymatic Ugi reactions

Bioorganic Chemistry 93 (2019) 102817

Monika Wilk, Anna Brodzka, Dominik Koszelewski, Arleta Madej, Daniel Paprocki, Anna Żądło-Dobrowolska, Ryszard Ostaszewski

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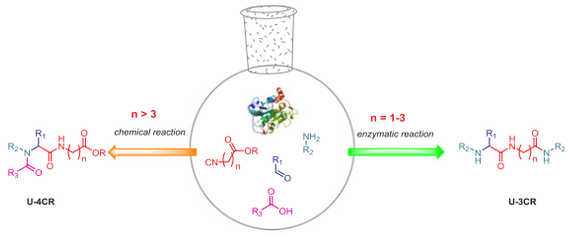

The studies on chemoselective promiscuous activity of hydrolases on acylals transformations

Bioorganic Chemistry 93 (2019) 102825

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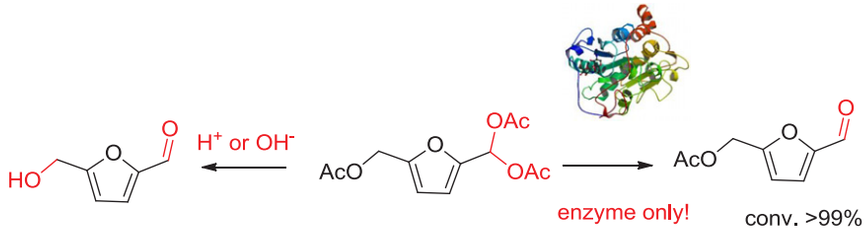

Biotransformation of rapeseed meal leading to production of polymers, biosurfactants, and fodder

Bioorganic Chemistry 93 (2019) 102825

Damian Konkol[a], Ida Szmigiel[b], Marta Domżał-Kędzia[b], Marek Kułażyński[c,d], Anna Krasowska[b,d], Sebastian Opaliński[a], Mariusz Korczyński[a], Marcin Łukaszewicz[b,d]

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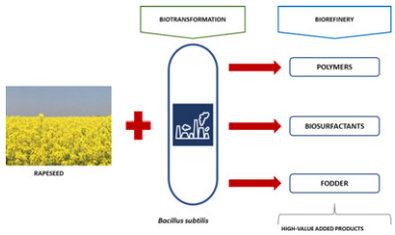

N-phosphonomethylglycine utilization by the psychrotolerant yeast *Solicoccozyma terricola* M 3.1.4.

Bioorganic Chemistry 93 (2019) 102866

Natalia Stosiek[a,1], Agata Terebieniec[b,1], Adam Ząbek[a,c], Piotr Młynarz[a], Hubert Cieśliński[b], Magdalena Klimek-Ochab[a]

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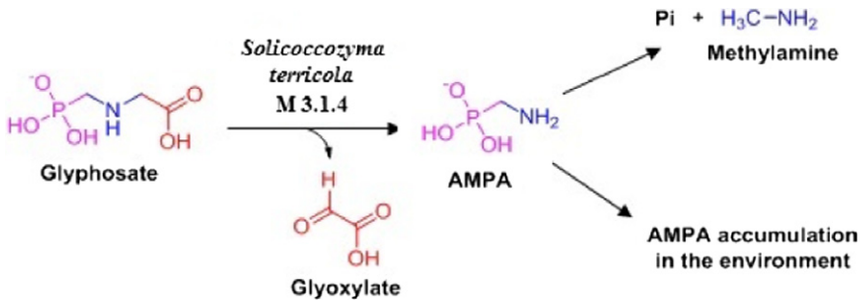

Hydrolysis of surfactin over activated carbon

Bioorganic Chemistry 93 (2019) 102896

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