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Bioorganic Chemistry

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REGULAR ARTICLES

Isoindolin-1-one derivatives as urease inhibitors: Design, synthesis, biological evaluation, molecular docking and *in-silico* ADME evaluation

Bioorganic Chemistry 87 (2019) pp. 1–11

Fariba Peytam[a], Mehdi Adib[a,*], Shabnam Mahernia[b], Mahmoud Rahmanian-Jazi[a], Mehdi Jahani[a], Behrad Masoudi[a], Mohammad Mahdavi[c], Massoud Amanlou[b,d,*]

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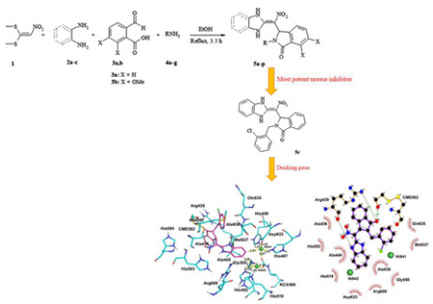
[d]*Department of Medicinal Chemistry, Faculty of Pharmacy, Tehran University of Medical Sciences, Tehran, Iran*



Anti-diabetic potential of Pueraria lobata root extract through promoting insulin signaling by PTP1B inhibition

Bioorganic Chemistry 87 (2019) pp. 12–15

Ran Sun, Xinxian Deng, Dongdong Zhang, Fangzhou Xie, Di Wang, Juntao Wang, Mojdeh S. Tavallaie, Faqin Jiang*, Lei Fu*

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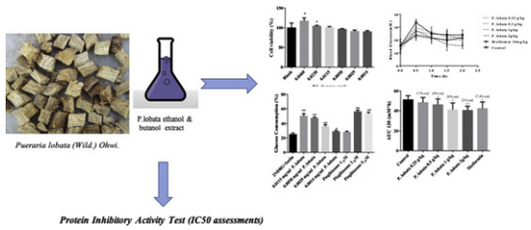

Azacoccone E inhibits cancer cell growth by targeting 3-phosphoglycerate dehydrogenase

Bioorganic Chemistry 87 (2019) pp. 16–22

Jing Guo[a,1], Xiaoxia Gu[a,1], Mengzhu Zheng[a,1], Yonghui Zhang[a,*], Lixia Chen[b,*], Hua Li[a,b,*]

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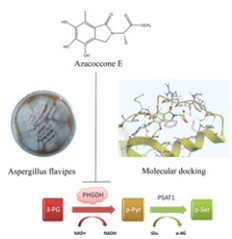

Cucurbitane-type compounds from *Momordica charantia*: Isolation, *in vitro* antidiabetic, anti-inflammatory activities and *in silico* modeling approaches

Bioorganic Chemistry 87 (2019) pp. 31–42

Siddanagouda R. Shivanagoudra[a], Wilmer H. Perera[a], Jose L. Perez[a], Giridhar Athrey[b], Yuxiang Sun[c], G.K. Jayaprakasha[a,*], Bhimanagouda S. Patil[a,*]

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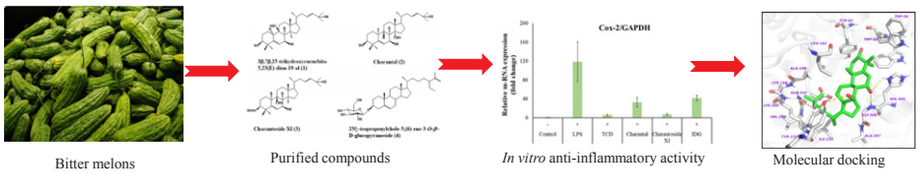

Tyrosinase inhibition and anti-melanin generation effect of cinnamamide analogues

Bioorganic Chemistry 87 (2019) pp. 43–55

Sultan Ullah[a], Chaeun Park[a], Muhammad Ikram[b,c], Dongwan Kang[a], Sanggwon Lee[a], Jungho Yang[a], Yujin Park[a], Sik Yoon[b], Pusoon Chun[d], Hyung Ryong Moon[a,*]

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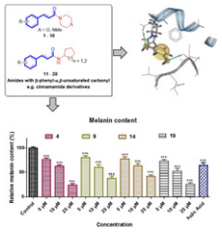

Development of novel 2-substituted acylaminoethylsulfonamide derivatives as fungicides against *Botrytis cinerea*

Bioorganic Chemistry 87 (2019) pp. 56–69

Minlong Wang[a], Ying Du[a], Chunhui Liu[a], Xinling Yang[b], Peiwen Qin[a], Zhiqiu Qi[a], Mingshan Ji[a], Xinghai Li[a,*]

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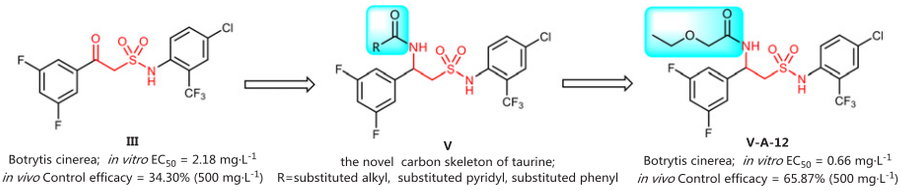

The comparative study of the DNA binding and biological activities of the quaternized dicnq as a dicationic form and its platinum(II) heteroleptic cationic complex

Bioorganic Chemistry 87 (2019) pp. 70–77

Ufuk Yıldız[a], Abdurrahman Şengül[a], Irfan Kandemir[b], Füsun Cömert[c], Senem Akkoç[d], Burak Coban[a,*]

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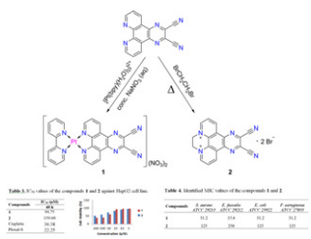

Synthesis of benzensulfonamides linked to quinazoline scaffolds as novel carbonic anhydrase inhibitors

Bioorganic Chemistry 87 (2019) pp. 78–90

Adel S. El-Azab[a,*], Alaa A.-M. Abdel-Aziz[a], Sivia Bua[b], Alessio Nocentini[b], Manal A. El-Gendy[a], Menshawy A. Mohamed[c,d], Taghreed Z. Shawer[e], Nawaf A. AlSaif[a], Claudiu T. Supuran[b,*]

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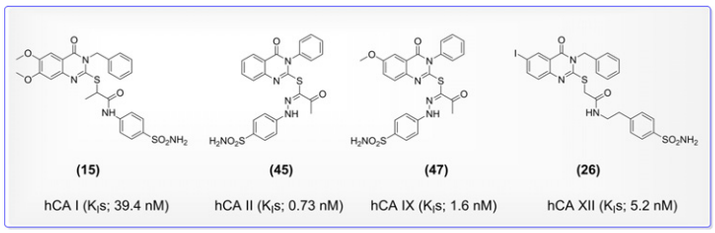

Synthesis and characterization of novel bromophenols: Determination of their anticholinergic, antidiabetic and antioxidant activities

Bioorganic Chemistry 87 (2019) pp. 91–102

Necla Öztaşkın*, Rüya Kaya, Ahmet Maraş*, Ertan Şahin, İlhami Gülcin, Süleyman Göksu

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Synthesis of compounds having antimicrobial activity from alginate

Bioorganic Chemistry 87 (2019) pp. 103–111

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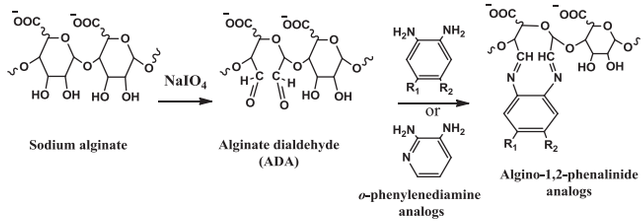

Synthesis and antiproliferative activity of new 2-glyco-3-nitro-2*H*-chromenes

Bioorganic Chemistry 87 (2019) pp. 112–116

Verónica Luque-Agudo[a,d], Jesús Albarrán-Velo[a], Mark E. Light[b], José M. Padrón[c], Emilio Román[a], José A. Serrano[a], M. Victoria Gil[a,*]

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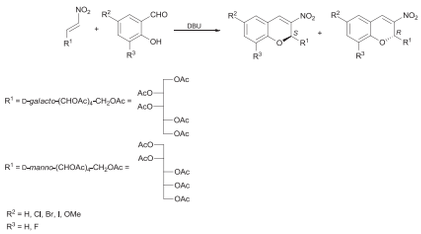

Sesquiterpenes from *Curcuma zedoaria* rhizomes and their cytotoxicity against human gastric cancer AGS cells

Bioorganic Chemistry 87 (2019) pp. 117–122

Tae Kyoung Lee[a], Dahae Lee[a], Seoung Rak Lee[a], Yoon-Joo Ko[b], Ki Sung Kang[c], Sang Jeon Chung[a], Ki Hyun Kim[a,*]

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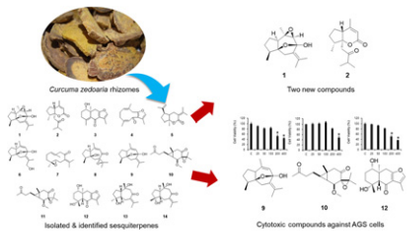

Synthesis and evaluation of novel α-substituted chalcones with potent anti-cancer activities and ability to overcome multidrug resistance

Bioorganic Chemistry 87 (2019) pp. 123–135

Sharon Riaz[a], Maheen Iqbal[b], Rahim Ullah[b], Rida Zahra[b], Ghayoor Abbas Chotana[a], Amir Faisal[b,*], Rahman Shah Zaib Saleem[a,*]

[a]Department of Chemistry and Chemical Engineering, Syed Babar Ali School of Science and Engineering, Lahore University of Management Sciences, Lahore 54792, Pakistan
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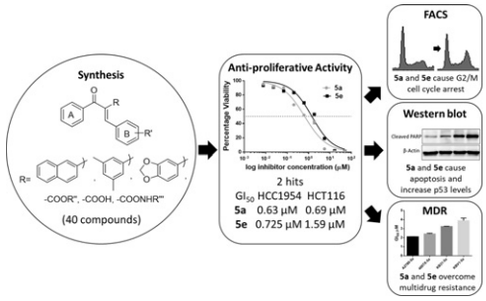

Iridoids from *Valeriana jatamansi* induce autophagy-associated cell death *via* the PDK1/Akt/mTOR pathway in HCT116 human colorectal carcinoma cells

Bioorganic Chemistry 87 (2019) pp. 136–141

Yu-Zhu Tan[a,b], Cheng Peng[a,b,*], Chang-Jiang Hu[b], Hong-Xiang Li[c], Wen-Bing Li[d], Jun-Lin He[a,b], Yu-Zhi Li[a,b], Hai Zhang[a,b], Ruo-Qi Zhang[a,b], Li-Xia Wang[a,b], Zhi-Xing Cao[a,b,*]

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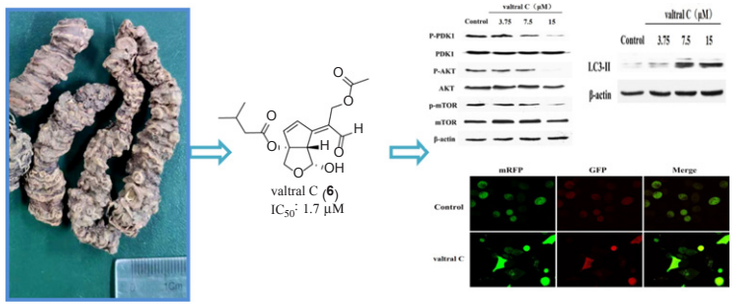

Synthesis of C–C, C–N coupled novel substituted dibutyl benzothiazepinone derivatives and evaluation of their thrombin inhibitory activity

Bioorganic Chemistry 87 (2019) pp. 142–154

C.P. Baburajeev[a,1], Chakrabhavi Dhananjaya Mohan[b,1], Vijay Pandey[c], Shobith Rangappa[d], Naveen Shivalingegowda[e], Leen Kalash[f], Sannaningaiah Devaraja[g], Andreas Bender[f], Peter E. Lobie[c], Kanchugarakoppal S. Rangappa[h,*], Basappa[a,i,*]

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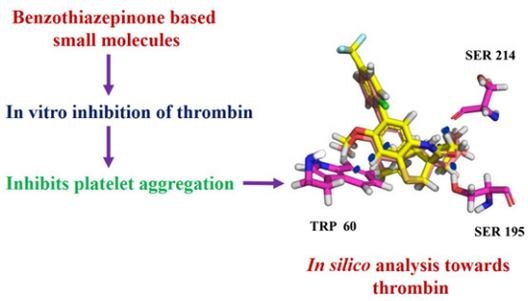

Synthesis and characterization of new thiosemicarbazones, as potent urease inhibitors: *In vitro* and *in silico* studies

Bioorganic Chemistry 87 (2019) pp. 155–162

Muhammad Islam[a,b], Ajmal Khan[b], Muhammad Tariq Shehzad[a], Abdul Hameed[c], Nadeem Ahmed[a], Sobia Ahsan Halim[b], Mohammed Khiat[b], Muhammad Usman Anwar[b], Javid Hussain[d], René Csuk[e], Zahid Shafiq[a,*], Ahmed Al-Harrasi[b,*]

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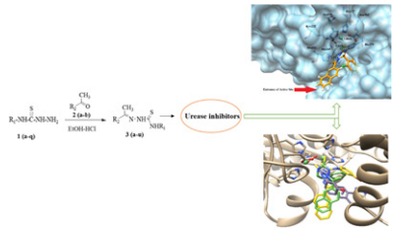

Synthesis and evaluation of novel benzotropolones as Atg4B inhibiting autophagy blockers

Bioorganic Chemistry 87 (2019) pp. 163–168

Muhammet Tanc[a,1], Matthias Cleenewerck[a,1], Ammar Kurdi[b], Ria Roelandt[c,d], Wim Declercq[c,d], Guido De Meyer[b], Koen Augustyns[a], Wim Martinet[b,*], Pieter Van der Veken[a,*]

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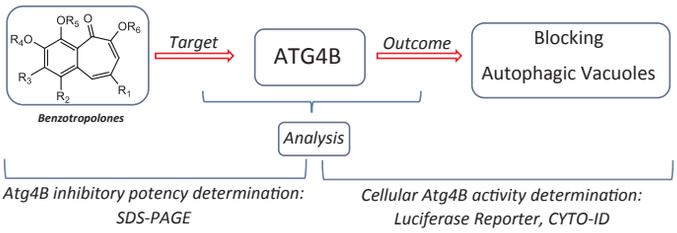

Evaluation of guanylhydrazone derivatives as inhibitors of *Candida rugosa* digestive lipase: Biological, biophysical, theoretical studies and biotechnological application

Bioorganic Chemistry 87 (2019) pp. 169–180

Camilla C. Santana[a], Edeíldo F. Silva-Júnior[a,b], João César N. Santos[b], Érica E. da S. Rodrigues[a], Isabella M. da Silva[b], João X. Araújo-Júnior[a,b], Ticiano G. do Nascimento[a], Leandro A. Oliveira Barbosa[c], Camila B. Dornelas[a], Isis M. Figueiredo[b], Josué Carinhanha C. Santos[b,*], Luciano Aparecido M. Grillo[a,*]

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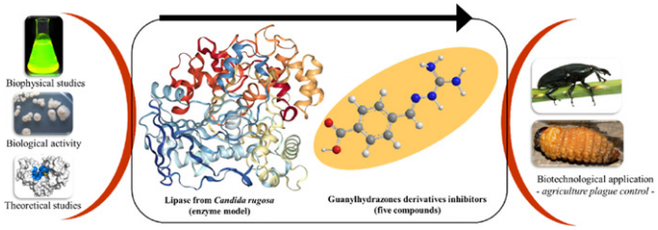

Pomalidomide hybrids act as proteolysis targeting chimeras: Synthesis, anticancer activity and B-Raf degradation

Bioorganic Chemistry 87 (2019) pp. 191–199

Hong Chen[1], Feihong Chen[1], Sinan Pei, Shaohua Gou[*]

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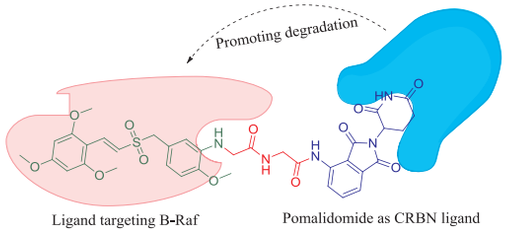

Development of a versatile DNMT and HDAC inhibitor C02S modulating multiple cancer hallmarks for breast cancer therapy

Bioorganic Chemistry 87 (2019) pp. 200–208

Zigao Yuan[a,b,1], Shaopeng Chen[b,c,1], Chunmei Gao[b,d], Qiuzi Dai[b], Cunlong Zhang[b], Qinsheng Sun[b], Jin-Shun Lin[b], Chun Guo[a], Yuzong Chen[b,e], Yuyang Jiang[a,b,f,*]

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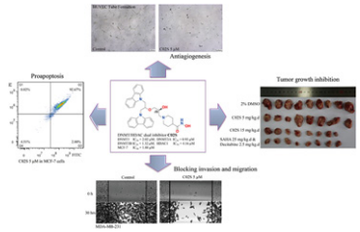

Rhamnolipid inspired lipopeptides effective in preventing adhesion and biofilm formation of *Candida albicans*

Bioorganic Chemistry 87 (2019) pp. 209–217

Milos Jovanovic[a], Jelena Radivojevic[b], Kevin O'Connor[c], Stevan Blagojevic[d], Biljana Begovic[d], Vera Lukic[e], Jasmina Nikodinovic-Runic[b,*], Vladimir Savic[a,*]

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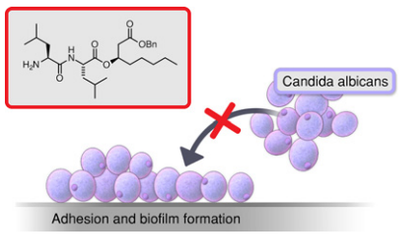

Nitrogen-containing derivatives of *O*-tetramethylquercetin: Synthesis and biological profiles in prostate cancer cell models

Bioorganic Chemistry 87 (2019) pp. 227–239

Pravien Rajaram[a], Ziran Jiang[a], Guanglin Chen[a], Alyssa Rivera[a], Alison Phasakda[a], Qiang Zhang[b,c], Shilong Zheng[b,c], Guangdi Wang[b,c], Qiao-Hong Chen[a,*]

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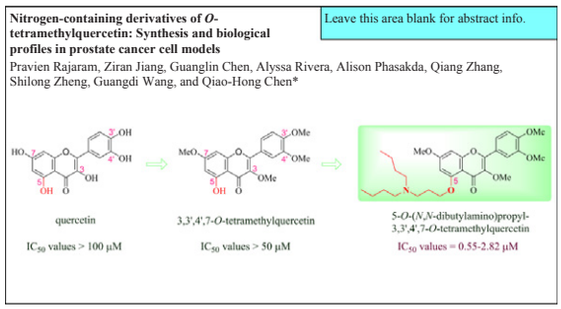

Structure-based design, synthesis and biological evaluation of a newer series of pyrazolo [1,5-*a*] pyrimidine analogues as potential anti-tubercular agents

Bioorganic Chemistry 87 (2019) pp. 240–251

Palmi Modi[a,b,d], Shivani Patel[a,c], Mahesh Chhabria[a,*]

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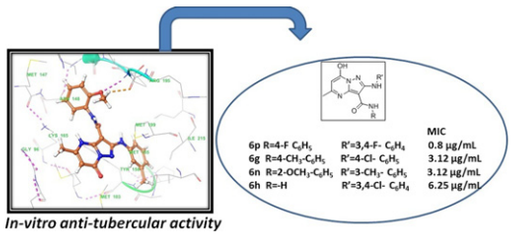

Anticancer and DNA binding studies of potential amino acids based quinazolinone analogs: Synthesis, SAR and molecular docking

Bioorganic Chemistry 87 (2019) pp. 252–264

K.P. Rakesh, H.K. Kumara, H.M. Manukumar, D. Channe Gowda[*]

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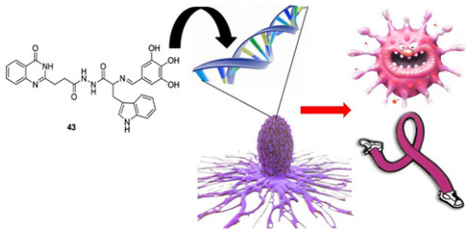

Characterization, quantitation, similarity evaluation and combination with Na^+,K^+-ATPase of cardiac glycosides from *Streblus asper*

Bioorganic Chemistry 87 (2019) pp. 265–275

Yidan Bai[a,b], Wanfang Zhu[a], Yunhui Xu[c], Zijian Xie[c], Toshihiro Akihisa[d], Jiradej Manosroi[e,f], Haopeng Sun[b], Feng Feng[a], Wenyuan Liu[b,*], Jie Zhang[a,*]

[a]*School of Traditional Chinese Pharmacy, China Pharmaceutical University, Nanjing 211198, China*
[b]*School of Pharmacy, China Pharmaceutical University, Nanjing 210009, China*
[c]*Marshall University, Marshall Institute for Interdisciplinary Research, Weisberg Engn Complex, RM 4117, 1628 Third Ave, Huntington, WV 25703, USA*
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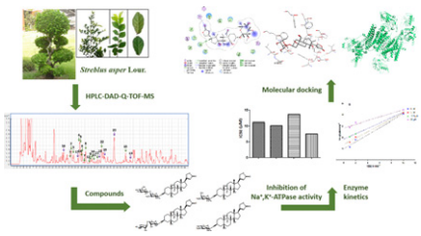
[f]*MANOSÉ Health and Beauty Research Center, 179 Moo 10, Liab Klong Chol Pratan Road, Suthep, Muang, Chiang Mai 50200, Thailand*



Interaction of C20-substituted derivative of pregnenolone acetate with copper (II) leads to ROS generation, DNA cleavage and apoptosis in cervical cancer cells: Therapeutic potential of copper chelation for cancer treatment

Bioorganic Chemistry 87 (2019) pp. 276–290

Atif Zafar[a], Swarnendra Singh[b], Sabahuddin Ahmad[c], Saman Khan[a], Mohammad Imran Siddiqi[c], Imrana Naseem[a,*]

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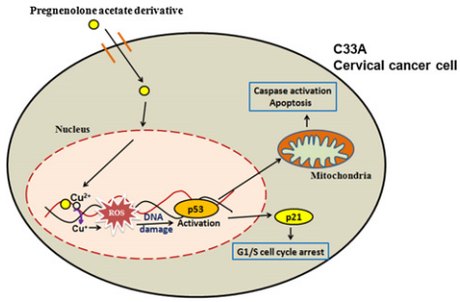
[b]*Department of Dermatology and Venereology, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110 029, India*
[c]*Molecular and Structural Biology Division, CSIR-Central Drug Research Institute, Lucknow 226031, Uttar Pradesh, India*

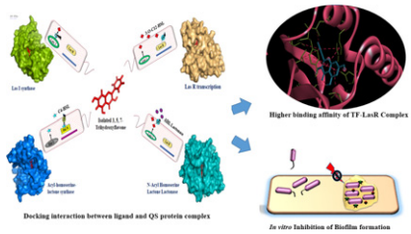


Inhibition of biofilm formation, quorum sensing activity and molecular docking study of isolated 3, 5, 7-Trihydroxyflavone from *Alstonia scholaris* leaf against *P.aeruginosa*

Bioorganic Chemistry 87 (2019) pp. 291–301

M. Abinaya, M. Gayathri*

Department of Biotechnology, School of Biosciences & Technology, Vellore Institute of Technology (VIT), Vellore 632014, Tamil Nadu, India



Synthesis, molecular docking studies, and antimicrobial evaluation of new structurally diverse ureas

Bioorganic Chemistry 87 (2019) pp. 302–311

Mahadev Patil[a], Anurag Noonikara Poyil[b], Shrinivas D. Joshi[c], Shivaputra A. Patil[d], Siddappa A. Patil[a,*], Alejandro Bugarin[b,*]

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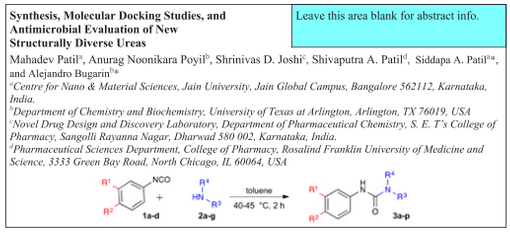
[b]*Department of Chemistry & Biochemistry, University of Texas at Arlington, Arlington, TX 76019, USA*
[c]*Novel Drug Design and Discovery Laboratory, Department of Pharmaceutical Chemistry, S. E. T's College of Pharmacy, Sangolli Rayanna Nagar, Dharwad 580 002, Karnataka, India*
[d]*Pharmaceutical Sciences Department, College of Pharmacy, Rosalind Franklin University of Medicine and Science, 3333 Green Bay Road, North Chicago, IL 60064, USA*



Bioassay-guided isolation of antioxidant and α-glucosidase inhibitory constituents from stem of *Vigna angularis*

Bioorganic Chemistry 87 (2019) pp. 312–320

Feng Guo[a], Shuoyang Zhang[a], Xiuying Yan[a], Yuhan Dan[a], Jian Wang[b], Yunli Zhao[a,*], Zhiguo Yu[a,*]

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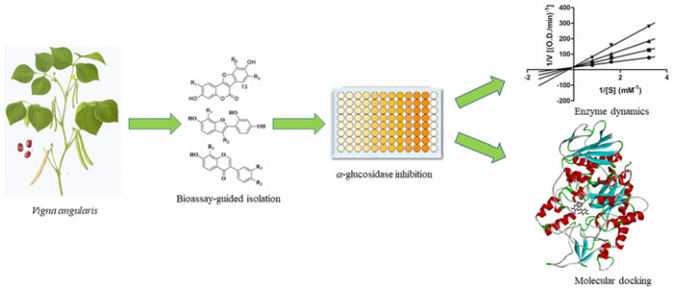
[b]*School of Pharmaceutical Engineering, Shenyang Pharmaceutical University, Shenyang 110016, China*



Sulfenamide derivatives can improve transporter-mediated cellular uptake of metformin and induce cytotoxicity in human breast adenocarcinoma cell lines

Bioorganic Chemistry 87 (2019) pp. 321–334

Magdalena Markowicz-Piasecka[a,*], Johanna Huttunen[b], Joanna Sikora[a], Kristiina M. Huttunen[b]

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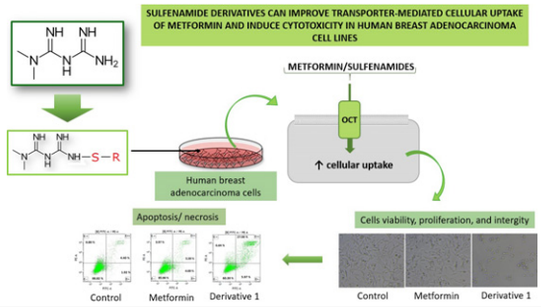

Synthesis of TPEN variants to improve cancer cells selective killing capacity

Bioorganic Chemistry 87 (2019) pp. 366–372

Stephanie Schaefer-Ramadan[a], Maciej Barlog[b], Jim Roach[c], Mohammed Al-Hashimi[b], Hassan S. Bazzi[b], Khaled Machaca[a,*]

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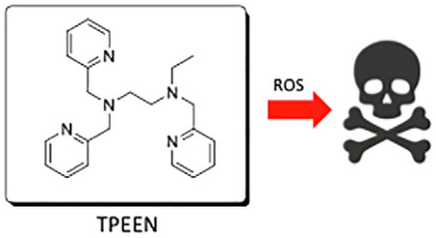
[b]Department of Chemistry, Texas A&M University at Qatar, P.O. Box 23874, Doha, Qatar
[c]Pre-Medical Education, Weill Cornell Medicine – Qatar, Doha, Qatar



Cytotoxic polyhydroxy serratene triterpenoids from *Lycopodium complanatum*

Bioorganic Chemistry 87 (2019) pp. 373–379

Qiuzhu Dong[a], Zhenxing Zou[a], Xiaohui Jia[c], Xia Yu[a], Jing Li[a], Wenhao Zhou[a], Huihui Sun[a], Wei Wu[a], Guishan Tan[a,b], Kangping Xu[a,*]

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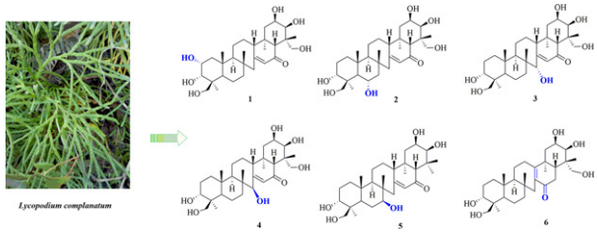
[b]Xiangya Hospital of Central South University, Changsha 410008, PR China
[c]School of Chemistry and Chemical Engineering, University of South China, Hengyang 421001, PR China

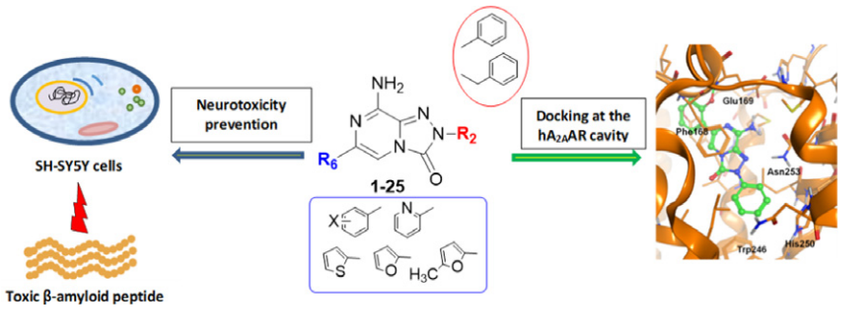


Novel 8-amino-1,2,4-triazolo [4,3-*a*] pyrazin-3-one derivatives as potent human adenosine A_1 and A_{2A} receptor antagonists. Evaluation of their protective effect against β-amyloid-induced neurotoxicity in SH-SY5Y cells

Matteo Falsini[a], Daniela Catarzi[a], Flavia Varano[a], Diego Dal Ben[b], Gabriella Marucci[b], Michela Buccioni[b], Rosaria Volpini[b], Lorenzo Di Cesare Mannelli[c], Carla Ghelardini[c], Vittoria Colotta[a,*]

[a]*Dipartimento di Neuroscienze, Psicologia, Area del Farmaco e Salute del Bambino, Sezione di Farmaceutica e Nutraceutica, Università degli Studi di Firenze, Via Ugo Schiff, 6, 50019 Sesto Fiorentino, Italy*
[b]*Scuola di Scienze del Farmaco e dei Prodotti della Salute, Università degli Studi di Camerino, via S. Agostino 1, 62032 Camerino, MC, Italy*
[c]*Dipartimento di Neuroscienze, Psicologia, Area del Farmaco e Salute del Bambino, Sezione di Farmacologia, Università degli Studi di Firenze, Viale Pieraccini 5, 50139 Firenze, Italy*

Bioorganic Chemistry 87 (2019) pp. 380–394

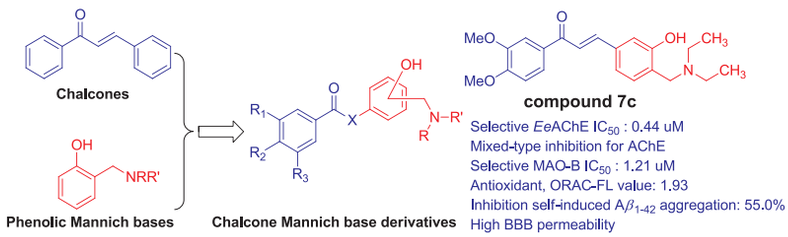


Design, synthesis and evaluation of chalcone Mannich base derivatives as multifunctional agents for the potential treatment of Alzheimer's disease

Xiaoyu Zhang, Qing Song, Zhongcheng Cao, Yan Li, Chaoquan Tian, Ziyi Yang, Heng Zhang, Yong Deng*

Department of Medicinal Chemistry, Key Laboratory of Drug-Targeting and Drug Delivery System of the Education Ministry, Sichuan Engineering Laboratory for Plant-Sourced Drug and Sichuan Research Center for Drug Precision Industrial Technology, West China School of Pharmacy, Sichuan University, Chengdu 610041, PR China

Bioorganic Chemistry 87 (2019) pp. 395–408

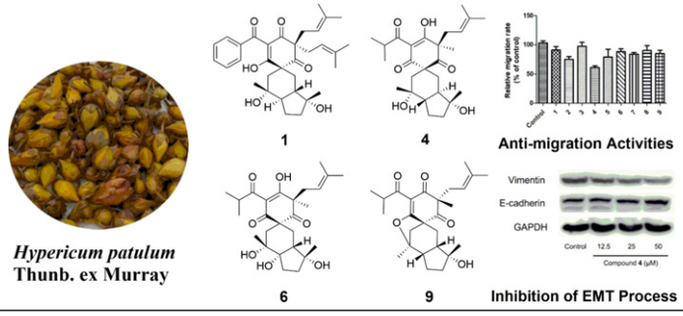


Hyperpatulols A–I, spirocyclic acylphloroglucinol derivatives with anti-migration activities from the flowers of *Hypericum patulum*

Yang-Yang Liu, Zhen Ao, Qi-Qi Xu, Dong-Rong Zhu, Chen Chen, Xiao-Bing Wang, Jian-Guang Luo*, Ling-Yi Kong*

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

Bioorganic Chemistry 87 (2019) pp. 409–416

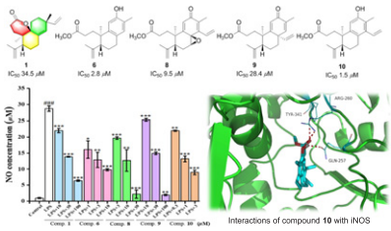


NO inhibitory phytochemicals as potential anti-inflammatory agents from the twigs of *Trigonostemon heterophyllus*

Bioorganic Chemistry 87 (2019) pp. 417–424

Yaru Xi[a,1], Lijun An[a,1], Xueyuan Yang[a], Ziteng Song[a], Jie Zhang[b], Muhetaer Tuerhong[c], Da-Qing Jin[d], Yasushi Ohizumi[e], Dongho Lee[f], Jing Xu[a,*], Yuanqiang Guo[a,*]

[a]State Key Laboratory of Medicinal Chemical Biology, College of Pharmacy, and Tianjin Key Laboratory of Molecular Drug Research, Nankai University, Tianjin 300350, China
[b]Key Laboratory for Green Processing of Chemical Engineering of Xinjiang Bingtuan, School of Chemistry and Chemical Engineering, Shihezi University, Shihezi 832003, China
[c]College of Chemistry and Environmental Sciences, Laboratory of Xinjiang Native Medicinal and Edible Plant Resources Chemistry, Kashgar University, Kashgar 844000, China
[d]School of Medicine, Nankai University, Tianjin 300071, China
[e]Kansei Fukushi Research Institute, Tohoku Fukushi University, Sendai 989-3201, Japan
[f]Department of Biosystems and Biotechnology, College of Life Sciences and Biotechnology, Korea University, Seoul 136-713, Republic of Korea



Design, synthesis, and carbonic anhydrase inhibition activity of benzenesulfonamide-linked novel pyrazoline derivatives

Bioorganic Chemistry 87 (2019) pp. 425–431

Alaa A.-M. Abdel-Aziz[a,*], Adel S. El-Azab[a], Silvia Bua[b], Alessio Nocentini[b], Mohamed A. Abu El-Enin[c], Mohammed M. Alanazi[a], Nawaf A. AlSaif[a], Mohamed M. Hefnawy[a], Claudiu T. Supuran[b,*]

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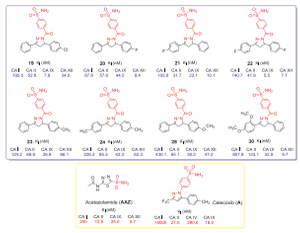
[c]Department of Medicinal Chemistry, Faculty of Pharmacy, University of Mansoura, Mansoura, Egypt



Organometallic ruthenium(II)-arene complexes with triphenylphosphine amino acid bioconjugates: Synthesis, characterization and biological properties

Bioorganic Chemistry 87 (2019) pp. 432–446

Margareta Pernar[a,1], Zoran Kokan[b,1], Juran Kralj[a], Zoran Glasovac[c], Lidija-Marija Tumir[c], Ivo Piantanida[c], Domagoj Eljuga[d], Iztok Turel[e], Anamaria Brozovic[a,*], Srećko I. Kirin[b,*]

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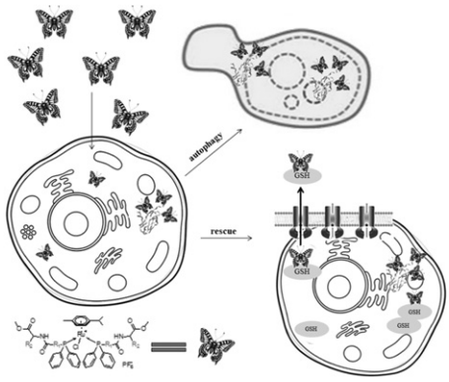
[b]Division of Materials Chemistry, Ruđer Bošković Institute, Bijenička cesta 54, HR-10000 Zagreb, Croatia
[c]Division of Organic Chemistry and Biochemistry, Ruđer Bošković Institute, Bijenička cesta 54, HR-10000 Zagreb, Croatia
[d]Department for Oncoplastic and Reconstructive Surgery, University Hospital for Tumors, University Clinical Hospital Centre Sisters of Mercy, HR-10000 Zagreb, Croatia
[e]Faculty of Chemistry and Chemical Technology, University of Ljubljana, Večna pot 113, SLO-1000 Ljubljana, Slovenia

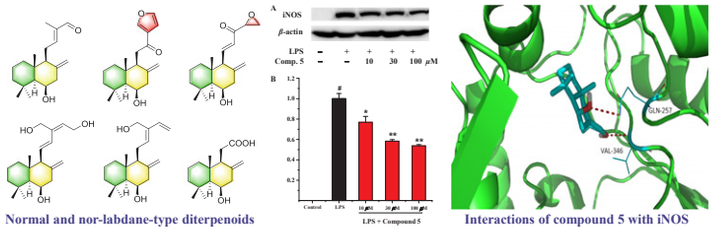


Bioactive terpenoids from *Euonymus verrucosus* var. *pauciflorus* showing NO inhibitory activities

Bioorganic Chemistry 87 (2019) pp. 447–456

Yuling Yang[a,1], Xueyuan Yang[a,1], Xuke Zhang[a], Ziteng Song[a], Feng Liu[a], Yue Liang[a], Jie Zhang[b], Da-Qing Jin[c], Jing Xu[a,*], Dongho Lee[d], Muhetaer Tuerhong[e], Yasushi Ohizumi[f], Yuanqiang Guo[a,*]

[a]*State Key Laboratory of Medicinal Chemical Biology, College of Pharmacy, and Tianjin Key Laboratory of Molecular Drug Research, Nankai University, Tianjin 300350, People's Republic of China*
[b]*Key Laboratory for Green Processing of Chemical Engineering of Xinjiang Bingtuan, School of Chemistry and Chemical Engineering, Shihezi University, Shihezi 832003, People's Republic of China*
[c]*School of Medicine, Nankai University, Tianjin 300071, People's Republic of China*
[d]*Department of Biosystems and Biotechnology, College of Life Sciences and Biotechnology, Korea University, Seoul 02841, Republic of Korea*
[e]*College of Chemistry and Environmental Sciences, Laboratory of Xinjiang Native Medicinal and Edible Plant Resources Chemistry, Kashgar University, Kashgar 844000, People's Republic of China*
[f]*Kansei Fukushi Research Institute, Tohoku Fukushi University, Sendai 989-3201, Japan*



Design and synthesis of mono-and di-pyrazolyl-*s*-triazine derivatives, their anticancer profile in human cancer cell lines, and *in vivo* toxicity in zebrafish embryos

Bioorganic Chemistry 87 (2019) pp. 457–464

Muhammad Farooq[a], Anamika Sharma[b], Zainab Almarhoon[c], Abudalla Al-Dhfyan[d,e], Ayman El-Faham[c,f,*], Nael Abu Taha[a], Mohammad A.M. Wadaan[a], Beatriz G. de la Torre[b,g], Fernando Albericio[b,c,h,i,j]

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[b]*Catalysis and Peptide Research Unit, School of Health Sciences, University of KwaZulu-Natal, University Road, Westville, Durban 4001, South Africa*
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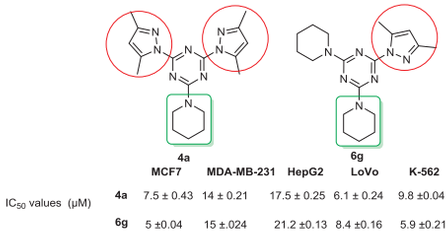
[e]*Stem Cell & Tissue Re-Engineering, King Faisal Specialist Hospital and Research Center, Riyadh 11211, Saudi Arabia*
[f]*Department of Chemistry, Faculty of Science, Alexandria University, P.O. Box 426, Alexandria 21321, Egypt*
[g]*KRISP, College of Health Sciences, University of KwaZulu-Natal, Westville, Durban 4001, South Africa*
[h]*School of Chemistry and Physics, University of KwaZulu-Natal, University Road, Westville, Durban 4001, South Africa*
[i]*Department of Organic Chemistry, University of Barcelona, Martí i Franqués 1-11, Barcelona 08028, Spain*
[j]*CIBER-BBN, Networking Centre on Bioengineering, Biomaterials and Nanomedicine, Barcelona Science Park, Baldiri Reixac 10, Barcelona 08028, Spain*



Meglumine as a green, efficient and reusable catalyst for synthesis and molecular docking studies of bis (indolyl)methanes as antioxidant agents

Bioorganic Chemistry 87 (2019) pp. 465–473

Bakthavatchala Reddy Nemallapudi[a], Grigory V. Zyryanov[a,b], Balakrishna Avula[c], Mallikarjuna Reddy Guda[a], Suresh Reddy Cirandur[d], Chintha Venkataramaiah[e], Wudayagiri Rajendra[e], Sravya Gundala[a,*]

[a]Chemical Engineering Institute, Ural Federal University, Yekaterinburg 620002, Russian Federation
[b]Ural Division of the Russian Academy of Sciences, I. Ya. Postovskiy Institute of Organic Synthesis, 22 S. Kovalevskoy Street, Yekaterinburg 620219, Russian Federation
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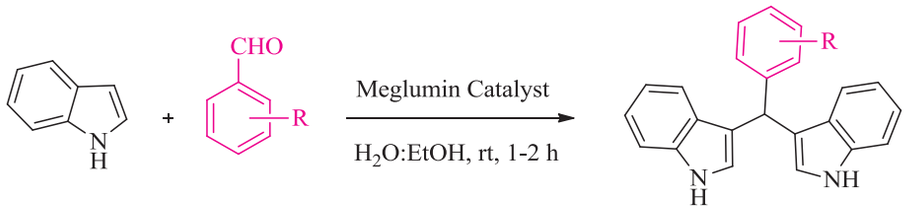
[d]Department of Chemistry, Sri Venkateswara University, Tirupati 517 502, Andhra Pradesh, India
[e]Division of molecular biology, Department of Zoology, Sri Venkateswara University, Tirupati 517502, Andhra Pradesh, India



Semi-synthetic isoflavones as BACE-1 inhibitors against Alzheimer's disease

Bioorganic Chemistry 87 (2019) pp. 474–483

Giovanni Ribaudo[a,1], Paolo Coghi[b,1], Enrico Zanforlin[a,1], Betty Yuen Kwan Law[b], Yuki Yu Jun Wu[b], Yu Han[b], Alena Congling Qiu[b], Yuan Qing Qu[b], Giuseppe Zagotto[a,*], Vincent Kam Wai Wong[b,*]

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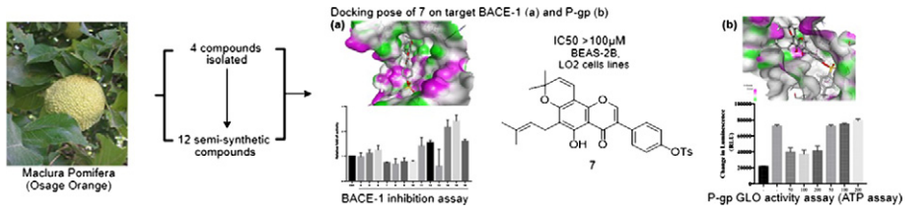
[b]State Key Laboratory of Quality Research in Chinese Medicine, Macau University of Science and Technology, Avenida Wai Long, Taipa, Macau

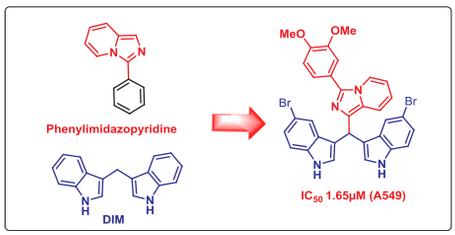


Synthesis and biological evaluation of new bisindole-imidazopyridine hybrids as apoptosis inducers

Bioorganic Chemistry 87 (2019) pp. 484–494

Satish Sunkari[a,b], Srinivasa Reddy Bonam[b,c,1], A.V. Subba Rao[a,2], Sd Riyaz[d], V. Lakshma Nayak[a], Halmuthur Mahabalarao Sampath Kumar[b,c], Ahmed Kamal[a,b,e,*], Bathini Nagendra Babu[a,b,*]

[a]Centre for Semio Chemicals, CSIR-Indian Institute of Chemical Technology (IICT), Hyderabad 500007, India
[b]Academy of Scientific and Innovative Research, New Delhi 110 025, India
[c]Vaccine Immunology Laboratory, Natural Product Chemistry Division, CSIR-Indian Institute of Chemical Technology (IICT), Hyderabad 500007, India
[d]Department of Chemistry, Jawaharlal Nehru Technological University, Hyderabad 500085, India
[e]School of Pharmaceutical Education and Research (SPER), Jamia Hamdard, New Delhi 110062, India

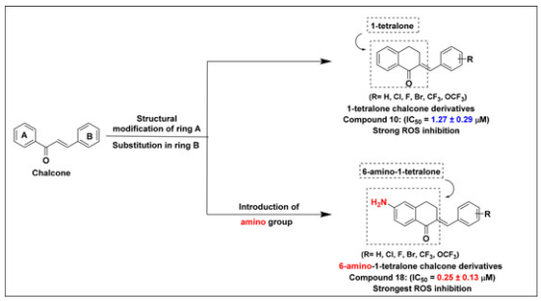


Introduction of amino moiety enhances the inhibitory potency of 1-tetralone chalcone derivatives against LPS-stimulated reactive oxygen species production in RAW 264.7 macrophages

Bioorganic Chemistry 87 (2019) pp. 495–505

Pramila Katila[1], Aastha Shrestha[1], Aarajana Shrestha, Ritina Shrestha, Pil-Hoon Park[*], Eung-Seok Lee[*]

College of Pharmacy, Yeungnam University, Gyeongsan 38541, Republic of Korea



New benzyl pyridinium derivatives bearing 2,4-dioxochroman moiety as potent agents for treatment of Alzheimer's disease: Design, synthesis, biological evaluation, and docking study

Bioorganic Chemistry 87 (2019) pp. 506–515

Marjan Mollazadeh[a], Maryam Mohammadi-Khanaposhtani[b], Afsaneh Zonouzi[a,*], Hamid Nadri[c], Zahra Najafi[d,e], Bagher Larijani[f], Mohammad Mahdavi[f,*]

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[b]*Cellular and Molecular Biology Research Center, Health Research Institute, Babol University of Medical Sciences, Babol, Iran*
[c]*Department of Medicinal Chemistry, Faculty of Pharmacy and Pharmaceutical Sciences Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran*
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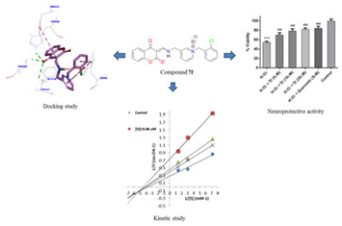

Sulfur, selenium and tellurium containing amines act as effective carbonic anhydrase activators

Bioorganic Chemistry 87 (2019) pp. 516–522

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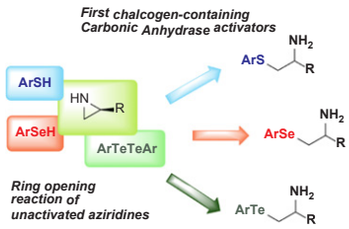

Natural product-based design, synthesis and biological evaluation of 2′,3,4,4′-tetrahydrochalcone analogues as antivitiligo agents

Bioorganic Chemistry 87 (2019) pp. 523–533

Hui Zhong[a], Jia Zhou[a,*], Xiao-Hong An[a], Ying-Rong Hua[a], Yi-Fan Lai[a], Rui Zhang[a], Owais Ahmad[a], Ye Zhang[b,c,*], Jing Shang[a,*]

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[c]*State Key Laboratory for Chemistry and Molecular Engineering of Medicinal Resources, School of Chemistry and Pharmacy, Guangxi Normal University, Guilin 541004, China*

Dual targeting of PTP1B and glucosidases with new bifunctional iminosugar inhibitors to address type 2 diabetes

Bioorganic Chemistry 87 (2019) pp. 534–549

Xhenti Ferhati[a,1], Camilla Matassini[a,1], Maria Giulia Fabbrini[a], Andrea Goti[a,b], Amelia Morrone[c], Francesca Cardona[a,b,*], Antonio J. Moreno-Vargas[d], Paolo Paoli[e,*]

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[d]Departamento de Química Orgánica, Facultad de Química, Universidad de Sevilla, n/Prof. García González 1, E-41012 Sevilla, Spain
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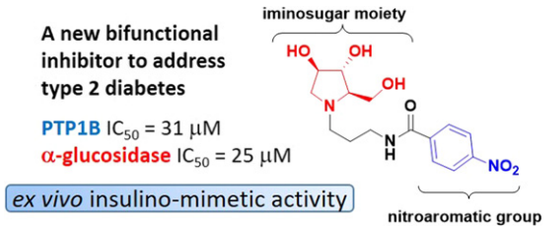

Synthesis, evaluation and docking of novel pyrazolo pyrimidines as potent p38α MAP kinase inhibitors with improved anti-inflammatory, ulcerogenic and TNF-α inhibitory properties

Bioorganic Chemistry 87 (2019) pp. 550–559

Kanagasabai Somakala, Sana Tariq, Mohd. Amir*

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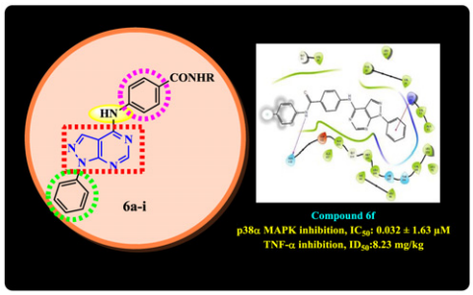

Antiproliferative effect, cell cycle arrest and apoptosis generation of novel synthesized anticancer heterocyclic derivatives based 4*H*-benzo[*h*]chromene

Bioorganic Chemistry 87 (2019) pp. 560–571

Fawzia F. Alblewi[a,*], Rawda M. Okasha[a], Zainab M. Hritani[a], Hany M. Mohamed[b,c], Mohammed A.A. El-Nassag[b,c], Ahmed H. Halawa[c], Ahmed Mora[c], Ahmed M. Fouda[d], Mohammed A. Assiri[d], Al-Anood M. Al-Dies[d], Tarek H. Afifi[a], Ahmed M. El-Agrody[c]

[a]Chemistry Department, Faculty of Science, Taibah University, 30002 Al-Madinah Al-Munawarah, Saudi Arabia
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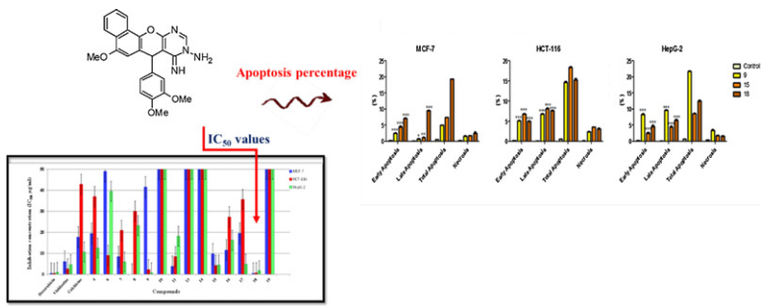
[c]Chemistry Department, Faculty of Science, Al-Azhar University, Nasr City 11884, Cairo, Egypt
[d]Chemistry Department, Faculty of Science, King Khalid University, Abha, 61413, P.O. Box 9004, Saudi Arabia



Multi-target-directed triazole derivatives as promising agents for the treatment of Alzheimer's disease

Bioorganic Chemistry 87 (2019) pp. 572–584

Anupamjeet Kaur[a], Sukhmani Mann[a], Amandeep Kaur[a], Nitesh Priyadarshi[c], Bhupesh Goyal[b,*], Nitin Kumar Singhal[c,*], Deepti Goyal[a,*]

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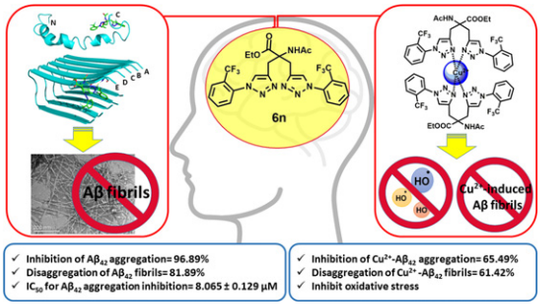

Withanolides from *Physalis peruviana* showing nitric oxide inhibitory effects and affinities with iNOS

Bioorganic Chemistry 87 (2019) pp. 585–593

Bangjian Dong[a], Lijun An[a], Xueyuan Yang[a], Xuke Zhang[a], Jie Zhang[b], Muhetaer Tuerhong[c], Da-Qing Jin[d], Yasushi Ohizumi[e], Dongho Lee[f], Jing Xu[a,*], Yuanqiang Guo[a,*]

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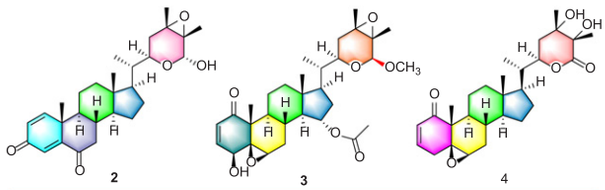
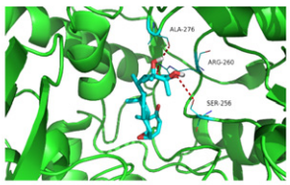


IC_{50} 7.0 μM IC_{50} 1.5 μM IC_{50} 1.4 μM



Interactions of compound **4** with iNOS

Design, synthesis and evaluation of 2-(indolylmethylidene)-2,3-dihydro-1-benzofuran-3-one and 2-(indolyl)-4*H*-chromen-4-one derivatives as novel monoamine oxidases inhibitors

Bioorganic Chemistry 87 (2019) pp. 594–600

Koichi Takao*, Shiori U, Hitoshi Kamauchi, Yoshiaki Sugita

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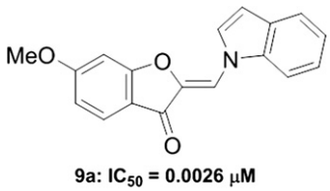

9a: IC_{50} = 0.0026 μM

Aurone-indole hybrids

Synthesis, biological evaluation and molecular modelling studies of 1,3,7,8-tetrasubstituted xanthines as potent and selective A_{2A} AR ligands with *in vivo* efficacy against animal model of Parkinson's disease

Bioorganic Chemistry 87 (2019) pp. 601–612

Suman Rohilla[a], Ranju Bansal[a,*], Sonja Kachler[b], Karl-Norbert Klotz[b]

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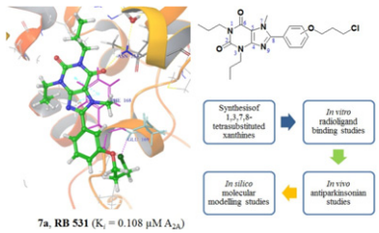

New phosphate derivatives of betulin as anticancer agents: Synthesis, crystal structure, and molecular docking study

Bioorganic Chemistry 87 (2019) pp. 613–628

Elwira Chrobak[a,*], Monika Kadela-Tomanek[a], Ewa Bębenek[a], Krzysztof Marciniec[a], Joanna Wietrzyk[b], Justyna Trynda[b], Bartosz Pawełczak[c], Joachim Kusz[d], Janusz Kasperczyk[e,f], Ewa Chodurek[e], Piotr Paduszyński[e], Stanisław Boryczka[a]

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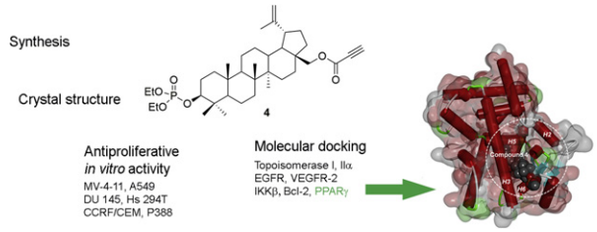

Tick-borne flavivirus reproduction inhibitors based on isoxazole core linked with adamantane

Bioorganic Chemistry 87 (2019) pp. 629–637

Dmitry A. Vasilenko[a], Evgenia V. Dueva[a,b,1], Liubov I. Kozlovskaya[b,c], Nikolay A. Zefirov[a,d], Yuri K. Grishin[a], Gennady M. Butov[e], Vladimir A. Palyulin[a,d], Tamara S. Kuznetsova[a], Galina G. Karganova[b,c], Olga N. Zefirova[a,d], Dmitry I. Osolodkin[a,b,c,*], Elena B. Averina[a,d,*]

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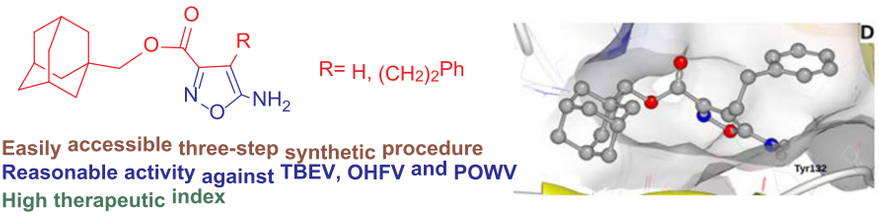

Discovery of new inhibitors against both NF-κB and osteoclastogenesis from in-house library with α, β-unsaturated-enone fragment

Bioorganic Chemistry 87 (2019) pp. 638–646

Chao Zhao[a], Dane Huang[a,b], Ruyue Li[b,d], Jiake Xu[e], Qiong Gu[a,*], Jun Xu[a,c,*]

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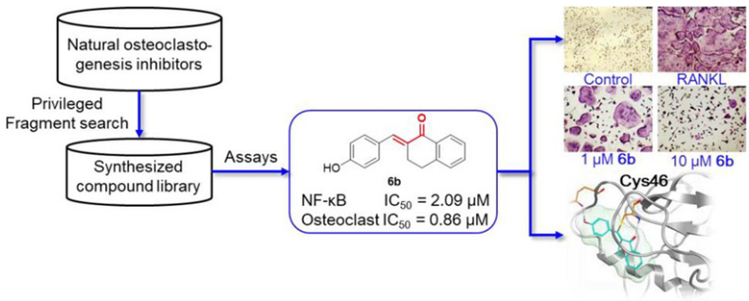
[d]Guangzhou University of Chinese Medicine, Guangdong Second Traditional Chinese Medicine Hospital, Guangzhou 510095, People's Republic of China
[e]Molecular Laboratory, School of Biomedical Science, University of Western Australia, Perth, Western Australia, Australia



In vitro and *in silico* studies of novel synthetic ACE-inhibitory peptides derived from *Saccharomyces cerevisiae* protein hydrolysate

Bioorganic Chemistry 87 (2019) pp. 647–654

Mahta Mirzaei[a,*,1], Saeed Mirdamadi[b,*,1], Maliheh Safavi[b], Mahnaz Hadizadeh[b]

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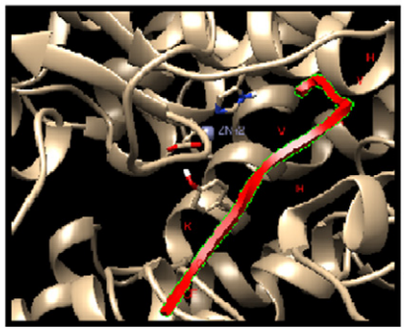
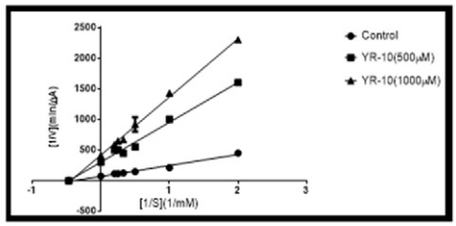
[b]Department of Biotechnology, Iranian Research Organization for Science & Technology (IROST), Tehran, Iran

YR-10	Y	G	K	P	V	A	V	P	A	R
GA-8		G	K	P	V	A	V	P	A	
GHA-8		G	K	H	V	A	V	H	A	
YHR-10	Y	G	K	H	V	A	V	H	A	R
PAR-3								P	A	R



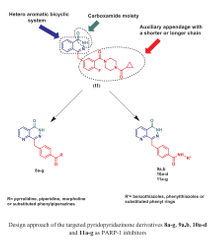


Design and synthesis of novel PARP-1 inhibitors based on pyridopyridazinone scaffold

Bioorganic Chemistry 87 (2019) pp. 655–666

Ghada F. Elmasry*, Enayat E. Aly, Fadi M. Awadallah, Samir M. El-Moghazy

Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Cairo University, El-Kasr El-Eini Street, P.O. Box 11562, Cairo, Egypt



Unveiling novel diphenyl-1*H*-pyrazole based acrylates tethered to 1,2,3-triazole as promising apoptosis inducing cytotoxic and anti-inflammatory agents

Bioorganic Chemistry 87 (2019) pp. 667–678

Mohemmed Faraz Khan[a], Tarique Anwer[b], Afroz Bakht[c], Garima Verma[a], Wasim Akhtar[a], M. Mumtaz Alam[a], Moshahid Alam Rizvi[d], Mymoona Akhter[a], Mohammad Shaquiquzzaman[a,*]

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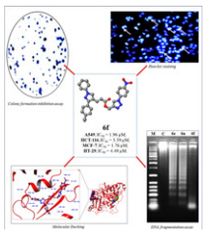
[d]*The Genome Biology Lab, Department of Biosciences, Jamia Millia Islamia, New Delhi 110025, India*



5-Thioxoimidazolidine-2-one derivatives: Synthesis, anti-inflammatory activity, analgesic activity, COX inhibition assay and molecular modelling study

Bioorganic Chemistry 87 (2019) pp. 679–687

Marwa A.M.Sh. El-Sharief[a,b,*], Samir Y. Abbas[c,*], Ahmed M.Sh. El-Sharief[d], Nermien M. Sabry[a], Ziad Moussa[e], Shahenda M. El-Messery[f], Ahmed R. Elsheakh[g], Ghada S. Hassan[h,*], Mardia T. El Sayed[a]

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[b]*Faculty of Science and Arts, Mohail Asser, King Khalid University, Saudi Arabia*
[c]*Organometallic and Organometalloid Chemistry Department, National Research Centre, Cairo, Egypt*
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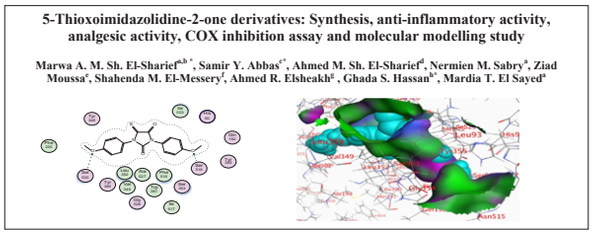

Sanggenon O induced apoptosis of A549 cells is counterbalanced by protective autophagy

Bioorganic Chemistry 87 (2019) pp. 688–698

Zhong-Rui Li[1], Ting Ma[1], Yan-Jia Guo, Bo Hu, Sheng-Hui Niu, Feng-Zhi Suo, Lin-Na Du, Ying-Hua You, Wen-Ting Kang, Shuan Liu, MAA Mamun, Qi-Meng Song, Jing-Ru Pang, Yi-Chao Zheng[*], Hong-Min Liu[*]

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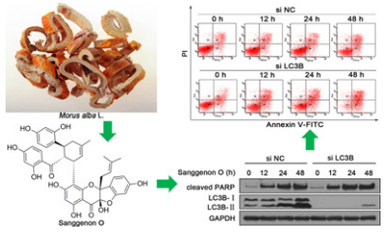
Key Laboratory of Advanced Drug Preparation Technologies (Zhengzhou University), Ministry of Education of China, PR China
Key Laboratory of Henan Province for Drug Quality and Evaluation, PR China
School of Pharmaceutical Sciences, Zhengzhou University, Zhengzhou 450001, PR China



Design and synthesis of parthenolide-SAHA hybrids for intervention of drug-resistant acute myeloid leukemia

Bioorganic Chemistry 87 (2019) pp. 699–713

Weizhi Ge[a], Zhongquan Liu[a], Yu Sun[b], Tianpeng Wang[a], Hongyu Guo[a], Xinyi Chen[a], Shengzu Li[a], Mengmeng Wang[c], Yue Chen[a,*], Yahui Ding[a,*], Quan Zhang[a,*]

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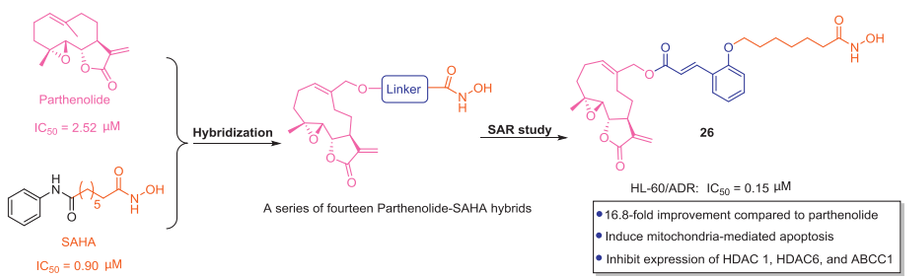

Design, synthesis and evaluation of a novel metal chelator as multifunctional agents for the treatment of Alzheimer's disease

Bioorganic Chemistry 87 (2019) pp. 720–727

Yingying Wang[a], Yue Yang[a], Kwon Ho Hong[b], Yao Ning[a], Ping Yu[a], Jinghui Ren[a], Min Ji[c,d], Jin Cai[a,d,*]

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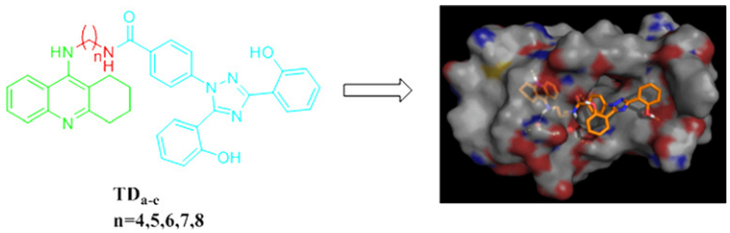

Natural flavonoid α-glucosidase inhibitors from *Retama raetam*: Enzyme inhibition and molecular docking reveal important interactions with the enzyme active site

Bioorganic Chemistry 87 (2019) pp. 736–742

Usman Ghani[a,*], Mohammad Nur-e-Alam[b], Muhammad Yousaf[b], Zaheer Ul-Haq[c], Omar M. Noman[b], Adnan J. Al-Rehaily[b]

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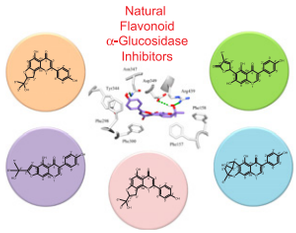

Antioxidant and angiotensin-converting enzyme (ACE) inhibitory activity of thymosin alpha-1 (Thα1) peptide

Bioorganic Chemistry 87 (2019) pp. 743–752

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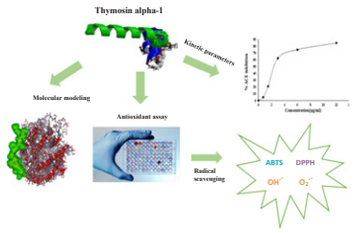

Design, synthesis and biological evaluation of *Helicobacter pylori* inosine 5′-monophosphate dehydrogenase (*Hp*IMPDH) inhibitors. Further optimization of selectivity towards *Hp*IMPDH over human IMPDH2

Bioorganic Chemistry 87 (2019) pp. 753–764

Chetan P. Shah[a], Gayathri Purushothaman[b], Vijay Thiruvenkatam[b,c], Sivapriya Kirubakaran[b,d], Kapil Juvale[a], Prashant S. Kharkar[a,*]

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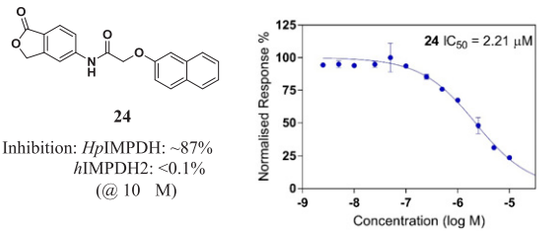
[c]*Physics, Indian Institute of Technology Gandhinagar, Palaj, Gandhinagar 382355, India*
[d]*Chemistry, Indian Institute of Technology Gandhinagar, Palaj, Gandhinagar 382355, India*



Synthesis and biological evaluation of coumarin-1,3,4-oxadiazole hybrids as selective carbonic anhydrase IX and XII inhibitors

Bioorganic Chemistry 87 (2019) pp. 765–772

Sridhar Goud Narella[a], Mohammed Ghouse Shaik[a], Arifuddin Mohammed[a], Mallika Alvala[a,*], Andrea Angeli[b], Claudiu T. Supuran[b,*]

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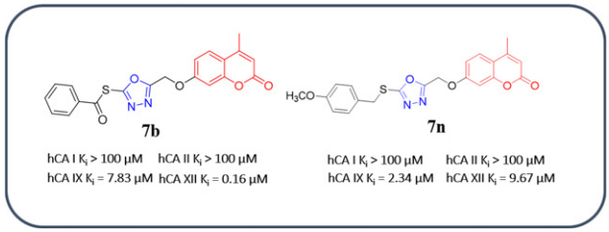

Probing the antibacterial and anticancer potential of tryptamine based mixed ligand Schiff base Ruthenium(III) complexes

Bioorganic Chemistry 87 (2019) pp. 773–782

Manzoor Ahmad Malik[a], Md Kausar Raza[b], Ovas Ahmad Dar[a], Amadudin[c], Mohammad Abid[c], Mohmmad Younus Wani[d,*], Abdullah Saad Al-Bogami[d], Athar Adil Hashmi[a,*]

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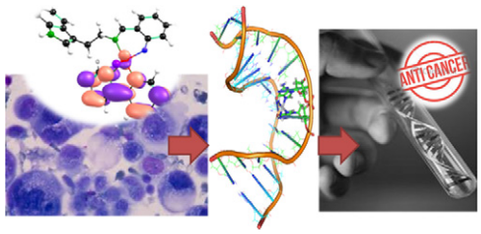
[b]*Department of Inorganic and Physical Chemistry, Indian Institute of Science, Bangalore 560012, India*
[c]*Medicinal Chemistry Lab., Department of Biosciences, Jamia Millia Islamia, New Delhi 110025, India*
[d]*Chemistry Department, Faculty of Science, University of Jeddah, P.O. Box 80327, Jeddah 21589, Saudi Arabia*



Furofuran lignans as a new series of antidiabetic agents exerting α-glucosidase inhibition and radical scarvenging: Semisynthesis, kinetic study and molecular modeling

Bioorganic Chemistry 87 (2019) pp. 783–793

Wisuttaya Worawalai[a], Titiruetai Doungwichitrkul[a], Warin Rangubpit[b], Panyakorn Taweechat[b], Pornthep Sompornpisut[b], Preecha Phuwapraisirisan[a,*]

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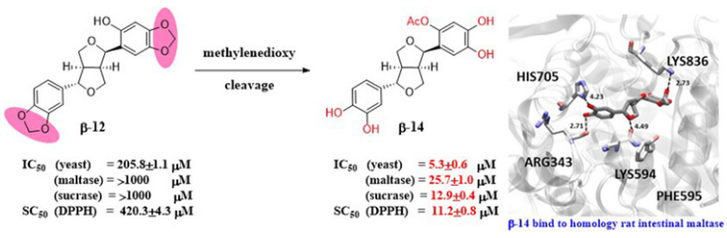
[b]*Center of Excellence in Computational Chemistry, Department of Chemistry, Faculty of Science, Chulalongkorn University, Bangkok 10330, Thailand*



Novel synthesized SLC-0111 thiazole and thiadiazole analogues: Determination of their carbonic anhydrase inhibitory activity and molecular modeling studies

Bioorganic Chemistry 87 (2019) pp. 794–802

Mahmoud F. Abo-Ashour[a], Wagdy M. Eldehna[b,*], Alessio Nocentini[c], Hany S. Ibrahim[a], Silvia Bua[c], Hatem A. Abdel-Aziz[d], Sahar M. Abou-Seri[e,*], Claudiu T. Supuran[c,*]

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[b]Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Kafrelsheikh University, Kafrelsheikh, P.O. Box 33516, Egypt
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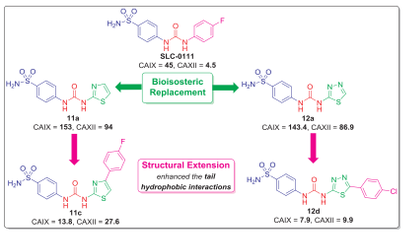
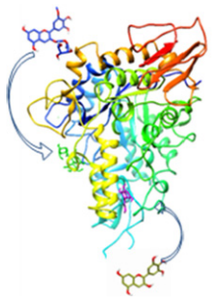


Mechanistic investigation of anthocyanidin derivatives as α-glucosidase inhibitors

Bioorganic Chemistry 87 (2019) pp. 803–809

Jang Hoon Kim, Hyo Young Kim, Chang Hyun Jin*

Advanced Radiation Technology Institute, Korea Atomic Energy Research Institute, Jeongeup 56212, Republic of Korea



Evaluation of angularly condensed diquinothiazines as potential anticancer agents

Bioorganic Chemistry 87 (2019) pp. 810–820

Małgorzata Jeleń[a], Krystian Pluta[a,*], Małgorzata Latocha[b], Beata Morak-Młodawska[a], Kinga Suwińska[c,d], Dariusz Kuśmierz[b]

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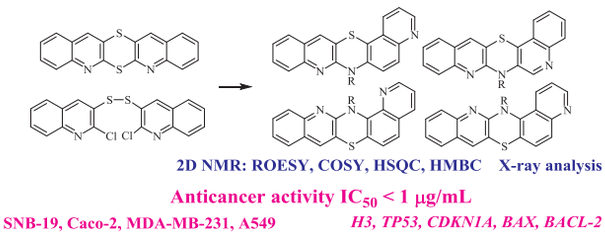

Synthesis and biological evaluation of purine-pyrazole hybrids incorporating thiazole, thiazolidinone or rhodanine moiety as 15-LOX inhibitors endowed with anticancer and antioxidant potential

Bioorganic Chemistry 87 (2019) pp. 821–837

Ola S. Afifi[a], Omaima G. Shaaban[a,b,*], Heba A. Abd El Razik[a], Shams El-Dine A. Shams El-Dine[a], Fawzia A. Ashour[a], Alaa A. El-Tombary[a], Marwa M. Abu-Serie[c]

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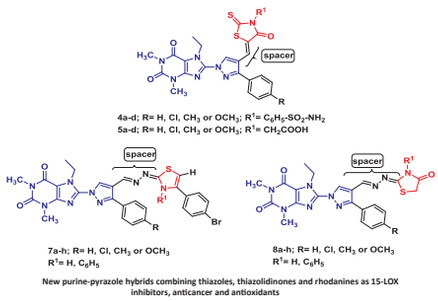

Synthesis, biological activity and multiscale molecular modeling studies of bis-coumarins as selective carbonic anhydrase IX and XII inhibitors with effective cytotoxicity against hepatocellular carcinoma

Bioorganic Chemistry 87 (2019) pp. 838–850

Belma Zengin Kurt[a,*], Aydan Dag[a], Berna Doğan[b], Serdar Durdagi[b,*], Andrea Angeli[c], Alessio Nocentini[c], Claudiu T. Supuran[c], Fatih Sonmez[d]

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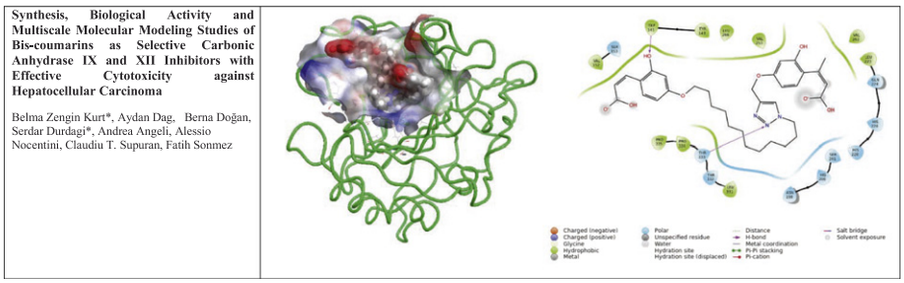

Xanthine oxidase inhibitors from an endophytic fungus *Lasiodiplodia pseudotheobromae*

Bioorganic Chemistry 87 (2019) pp. 851–856

Sanjay Kumar[a], Amol Dilip Pagar[a], Furkan Ahmad[a], Vagish Dwibedi[b], Aabid Wani[c], Prasad V. Bharatam[c], Manmohan Chhibber[d], Sanjai Saxena[b,*], Inder Pal Singh[a,*]

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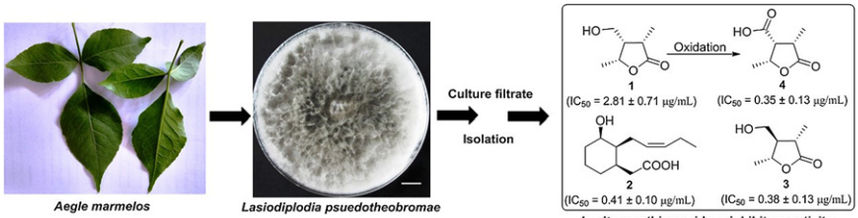

Benzoxazinone-thiosemicarbazones as antidiabetic leads *via* aldose reductase inhibition: Synthesis, biological screening and molecular docking study

Bioorganic Chemistry 87 (2019) pp. 857–866

Muhammad Tariq Shehzad[a], Aqeel Imran[b], Guy Sedar Singor Njateng[b], Abdul Hameed[c], Muhammad Islam[a], Mariya al-Rashida[d], Maliha Uroos[e], Asnuzilawati Asari[f], Zahid Shafiq[a,*], Jamshed Iqbal[b,*]

[a]*Institute of Chemical Sciences, Bahauddin Zakariya University, Multan 60800, Pakistan*
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[c]*H.E.J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Karachi 75270, Pakistan*
[d]*Department of Chemistry, Forman Christian College (A Chartered University), Ferozepur Road, Lahore 54600, Pakistan*
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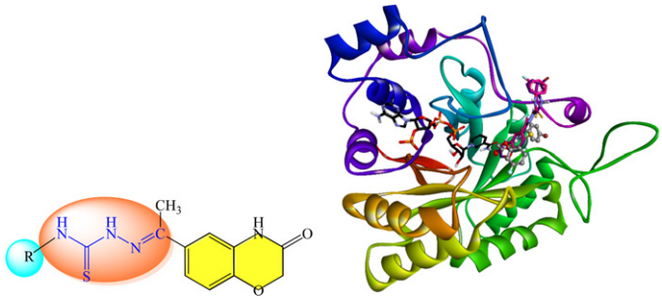
[f]*School of Fundamental Science, Universiti Malaysia Terengganu, 21030 Kuala Terengganu, Terengganu, Malaysia*

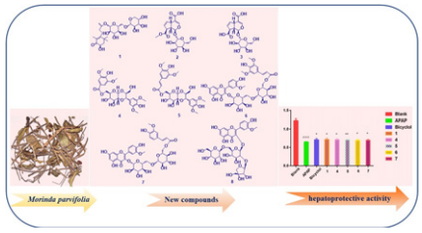


Eight new glycosides with hepatoprotective activity isolated from the aerial parts of *Morinda parvifolia*

Bioorganic Chemistry 87 (2019) pp. 867–875

Xianming Su, Li Li, Hua Sun, Fan Zhang, Changkang Li, Fenghua Li, Hongqing Wang, Baoming Li, Ruoyun Chen, Jie Kang*

State Key Laboratory of Bioactive Substances and Functions of Natural Medicines, Institute of Materia Medica, Chinese Academy of Medical Sciences & Peking Union Medical College, No. 1 Xiannongtan Street, Beijing 100050, China



Fluorescent labeling of ursolic acid with FITC for investigation of its cytotoxic activity using confocal microscopy

Bioorganic Chemistry 87 (2019) pp. 876–887

Tatiana S. Frolova[a,b,c,d,*], Alla V. Lipeeva[b], Dmitry S. Baev[b,c], Sergey I. Baiborodin[a], Konstantin E. Orishchenko[a], Alexey V. Kochetov[a,c], Olga I. Sinitsyna[a,c]

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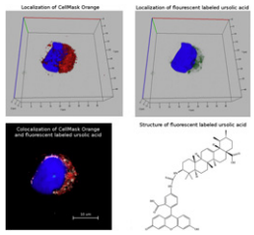
[b]*Novosibirsk Institute of Organic Chemistry of Siberian Branch of the Russian Academy of Sciences, 10, Lavrentyev Ave., 630090 Novosibirsk, Russia*
[c]*Novosibirsk State University, 2, Pirogov Street, 630090 Novosibirsk, Russia*
[d]*Federal Research Center of Fundamental and Translational Medicine of Siberian Branch of the Russian Academy of Sciences, 2, Timakov Street, 630117 Novosibirsk, Russia*



Synthesis, bioactivity and molecular modeling studies on potential anti-Alzheimer piperidinehydrazide-hydrazones

Bioorganic Chemistry 87 (2019) pp. 888–900

Sulunay Parlar[a], Gozde Sayar[a], Ayse Hande Tarikogullari[a], Sumru Sozer Karadagli[b], Vildan Alptuzun[a,*], Ercin Erciyas[a], Ulrike Holzgrabe[c]

[a]*Department of Pharmaceutical Chemistry, Faculty of Pharmacy, Ege University, 35040 Izmir, Turkey*
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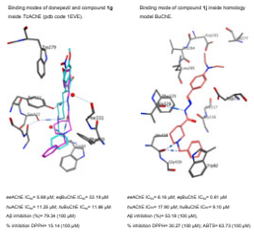

REVIEW ARTICLES

Promising anti-inflammatory effects of chalcones via inhibition of cyclooxygenase, prostaglandin E_2, inducible NO synthase and nuclear factor κb activities

Bioorganic Chemistry 87 (2019) pp. 335–365

Haroon ur Rashid[a,d], Yiming Xu[a], Nasir Ahmad[c], Yaseen Muhammad[a], Lisheng Wang[a,b,*]

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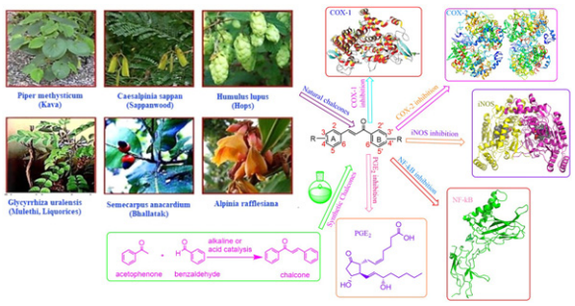
[c]*Department of Chemistry, Islamia College University, Peshawar, Khyber Pakhtunkhwa, Pakistan*
[d]*Department of Chemistry, Sarhad University of Science & Information Technology, 25000 Peshawar, Khyber Pakhtunkhwa, Pakistan*



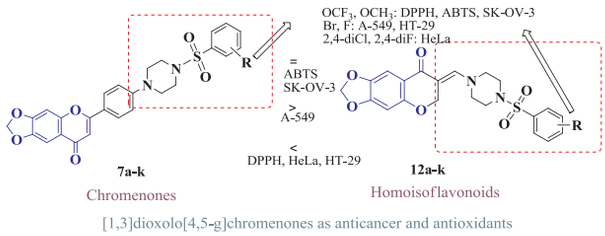
PRELIMINARY COMMUNICATIONS

Phenylsulfonyl piperazine bridged [1,3] dioxolo [4,5-*g*] chromenones as promising antiproliferative and antioxidant agents

Bioorganic Chemistry 87 (2019) pp. 23–30

Rahul V. Patel[a], Bhupendra M. Mistry[a], Riyaz Syed[b], Nikhil M. Parekh[c], Han-Seung Shin[a,*]

[a]*Department of Food Science and Biotechnology, Dongguk University-Seoul, Ilsandong-gu, Goyang-si, Gyenggi-do 410820, Republic of Korea*
[b]*Department of Chemistry, Jawaharlal Nehru Technological University, Kukatpally, Hyderabad 500 085, India*
[c]*Shroff S.R. Rotary Institute of Chemical Technology, Valia 393 135, India*



Natural and semisynthetic oxyprenylated aromatic compounds as stimulators or inhibitors of melanogenesis

Bioorganic Chemistry 87 (2019) pp. 181–190

Salvatore Genovese[a], Francesco Epifano[a,*], Philippe de Medina[c], Nicolas Caron[b], Arnaud Rives[b], Marc Poirot[c], Sandrine Silvente-Poirot[c], Serena Fiorito[a]

[a]*Dipartimento di Farmacia, Università "G. d'Annunzio" of Chieti-Pescara, Via dei Vestini 31, 66100 Chieti Scalo (CH), Italy*
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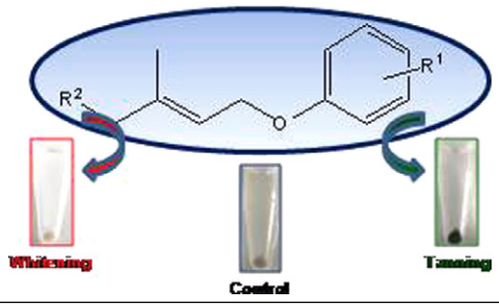
[c]*Cholesterol Metabolism and Therapeutic Innovations, Cancer Research Center of Toulouse (CRCT), UMR 1037, Université de Toulouse, CNRS, Inserm, Toulouse, France*

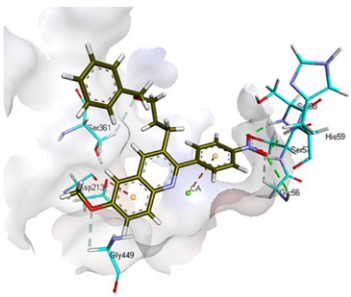


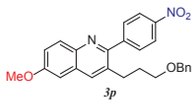
Investigation of new quinoline derivatives as promising inhibitors of NTPDases: Synthesis, SAR analysis and molecular docking studies

Bioorganic Chemistry 87 (2019) pp. 218–226

Komal Hayat[a], Saira Afzal[b], Altaf Saeed[a], Amna Murtaza[a], Shafiq Ur Rahman[b], Khalid Mohammed Khan[c,d], Aamer Saeed[a], Sumera Zaib[b], Joanna Lecka[e,f], Jean Sévigny[e,f], Jamshed Iqbal[b,*], Abbas Hassan[a,*]

[a]*Department of Chemistry, Quaid-i-Azam University, Islamabad 45320, Pakistan*
[b]*Centre for Advanced Drug Research, COMSATS University Islamabad, Abbottabad Campus, Abbottabad 22060, Pakistan*
[c]*H.E. J. Research Institute of Chemistry, International Center for Chemical and Biological Sciences, University of Karachi, Karachi 75720 Pakistan*
[d]*Department of Clinical Pharmacy, Institute for Research and Medical Consultations (IRMC), Imam Abdulrahman Bin Faisal University, P.O. Box 31441, Dammam, Saudi Arabia*
[e]*Département de microbiologie-infectiologie et d'immunologie, Faculté de Médecine, Université Laval, Québec, QC G1V 0A6, Canada*
[f]*Centre de Recherche du CHU de Québec – Université Laval, Québec, QC G1V 4G2, Canada*





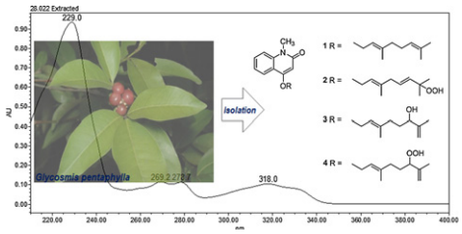
***h*-NTPDase1** IC$_{50}$ (μM)[a] ± SEM / %inhibition	
3p	**0.23 ± 0.09**
Suramin	16.1 ± 1.08

Glycopentanolones A-D, four new geranylated quinolone alkaloids from *Glycosmis pentaphylla*

Bioorganic Chemistry 87 (2019) pp. 714–719

Yun-Hyeok Choi[a,b,1], Changon Seo[a,1], Wonsik Jeong[a], Ji Eun Lee[a], Jae Yeon Lee[a], Eun-Kyung Ahn[a], Jae-Shin Kang[c], Jae-Ho Lee[c], Chun Whan Choi[a], Joa Sub Oh[d], Dongho Lee[b,*], Seong Su Hong[a,*]

[a]*Bio-Center, Gyeonggido Business & Science Accelerator (GBSA), Suwon 16229, Republic of Korea*
[b]*Department of Biosystems and Biotechnology, College of Life Sciences and Biotechnology, Korea University, Seoul 02841, Republic of Korea*
[c]*Biological Genetic Resources Utilization Division, National Institute of Biological Resources (NIBR), Incheon 22689, Republic of Korea*
[d]*College of Pharmacy, Dankook University, Cheonan 330-714, Republic of Korea*



Lithocarols A-F, six tenellone derivatives from the deep-sea derived fungus *Phomopsis lithocarpus* FS508

Bioorganic Chemistry 87 (2019) pp. 728–735

Jianlin Xu[a,b], Zhaoming Liu[a], Yuchan Chen[a], Haibo Tan[c], Haohua Li[a], Saini Li[a], Heng Guo[a,b], Zilei Huang[a], Xiaoxia Gao[b], Hongxin Liu[a,*], Weimin Zhang[a,*]

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[b]*College of Pharmacy, Guangdong Pharmaceutical University, Guangzhou 510006, China*
[c]*Key Laboratory of Plant Resources Conservation and Sustainable Utilization, Guangdong Provincial Key Laboratory of Applied Botany, South China Botanical Garden, Chinese Academy of Sciences, Guangzhou 510650, China*