Scopus (/home.uri?zone=header&origin=searchbasic)

Document details

< Back to results (https://www.scopus.com/results/results.uri?sort=plf-f&src=s&st1=Urinary+metabolomics+study+on+the+protective+role+of+Orthosiphon+stamineus+in+Streptozotocin+induced+diabetes+mellitus+in+rats+via+1H-ABS-KEY%28Urinary+metabolomics+study+on+the+protective+role+of+Orthosiphon+stamineus+in+Streptozotocin+induced+diabetes+mellitus+in+rats+via+1H-
1 of 1

Export Download Print E-mail Save to PDF Add to List More... >

Full Text (https://www.scopus.com/redirect/linking.uri?targetURL=https%3a%2f%2fdoi.org%2f10.1186%2fs12906-017-1777-1&locationID=1&categoryID=4&eid=2-s2.0-85019553883&issn=14726882&linkType=TemplateLinking&year=2017&zone=outwardlinks&origin=recordpage&dig=7e140d774a0382863220a496763fe8f1&reco
at Publisher (https://www.scopus.com/redirect/linking.uri?targetURL=https%3a%2f%2fdoi.org%2f10.1186%2fs12906-017-1777-1&locationID=1&categoryID=4&eid=2-s2.0-85019553883&issn=14726882&linkType=ViewAtPublisher&year=2017&origin=recordpage&dig=3f21ee27c8dc110b0a8faaae567e76fa&recordRank=)

Metrics View all metrics >

3 Tweets
70th Percentile

3 Posts on Facebook
97th Percentile

BMC Complementary and Alternative Medicine (https://www.scopus.com/sourceid/34441?origin=recordpage)
Volume 17, Issue 1, 25 May 2017, Article number 278 Open Access

Urinary metabolomics study on the protective role of Orthosiphon stamineus in Streptozotocin induced diabetes mellitus in rats via ^{1}H NMR spectroscopy (Article)

Azam, A.A.[a] (https://www.scopus.com/authid/detail.uri?authorId=57095578400&eid=2-s2.0-85019553883) (mailto:amalina_azam@hotmail.com),
Pariyani, R.[a] (https://www.scopus.com/authid/detail.uri?authorId=55676532300&eid=2-s2.0-85019553883) (mailto:raghunathpariyani@gmail.com),
Ismail, I.S.[a] (https://www.scopus.com/authid/detail.uri?authorId=7103005751&eid=2-s2.0-85019553883) (mailto:safinar@upm.edu.my),
Ismail, A.[b] (https://www.scopus.com/authid/detail.uri?authorId=35511562200&eid=2-s2.0-85019553883) (mailto:aminis@upm.edu.my),
Khatib, A.[c] (https://www.scopus.com/authid/detail.uri?authorId=12140192900&eid=2-s2.0-85019553883) (mailto:alfikhatib@iium.edu.my),
Abas, F.[a] (https://www.scopus.com/authid/detail.uri?authorId=6506864882&eid=2-s2.0-85019553883) (mailto:faridah_abas@upm.edu.my),
Shaari, K.[a] (https://www.scopus.com/authid/detail.uri?authorId=6602349732&eid=2-s2.0-85019553883) (mailto:khozirah@upm.edu.my)

[a]Universiti Putra Malaysia, Laboratory of Natural Products, Institute of Bioscience, Serdang, Selangor, Malaysia
[b]Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Department of Biomedical Sciences, Serdang, Selangor, Malaysia
[c]Faculty of Pharmacy, International Islamic University Malaysia, Kuantan, Pahang, Malaysia

View additional affiliations

Abstract

View references (32)

Background: Orthosiphon stamineus (OS) is a herb known in ethnomedicine for treating diabetes mellitus (DM). In this study, a ^{1}H NMR based urine metabolomics tool has been used for the first time to identify the metabolic protective mechanism of OS in DM using Streptozotocin (STZ) induced experimental model in rats. Methods: Four different solvent extracts of OS, namely aqueous, ethanolic, 50% aqueous ethanolic and methanolic, at a dose of 500 mg/kg body weight (bw) were orally administered for 14 days to diabetic rats induced via intraperitoneal injection of 60 mg/kg bw STZ. NMR metabolomics approach using pattern recognition combined with multivariate statistical analysis was applied in the rat urine to study the resulted metabolic perturbations. Results: OS aqueous extract (OSAE) caused a reversal of DM comparable to that of 10 mg/kg bw glibenclamide. A total of 15 urinary metabolites, which levels changed significantly upon treatment were identified as the biomarkers of OSAE in diabetes. A systematic metabolic pathways analysis identified that OSAE contributed to the antidiabetic activity mainly through

Cited by 0 documents

Inform me when this document is cited in Scopus:

Set citation alert > (/alert/form/documen

Set citation feed > (/results/rss/handler.u

Related documents

Urinary metabolic profiling of cisplatin nephrotoxicity and nephroprotective effects of Orthosiphon stamineus leaves elucidated by ^{1}H NMR spectroscopy (https://www.scopus.com/record/disp origin=recordpage&zone=relatedDoc s2.0-85006138057&citeCnt=0&noHighlig f&src=s&st1=Urinary+metabolomics+ ABS-KEY%28Urinary+metabolomics+stud Pariyani, R. (https://www.scopus.com/authid/deta origin=recordpage&authorId=556765 , Ismail, I.S. (https://www.scopus.com/authid/deta origin=recordpage&authorId=710300 , Azam, A. (https://www.scopus.com/authid/deta origin=recordpage&authorId=570955 *(2017) Journal of Pharmaceutical and Biomedical Analysis*

Evaluation of α-Glucosidase Inhibitory Effect of 50% Ethanolic Standardized Extract of Orthosiphon stamineus Benth in Normal and Streptozotocin-Induced Diabetic Rats (https://www.scopus.com/record/disp origin=recordpage&zone=relatedDoc s2.0-84948761604&citeCnt=0&noHighlig f&src=s&st1=Urinary+metabolomics+