

Accepted Manuscript

Green synthesis, biological evaluation, molecular docking studies and 3D-QSAR analysis of novel phenylalanine linked quinazoline-4(3*H*)-one-sulphonamide hybrid entities distorting the malarial reductase activity in folate pathway

Tarosh S. Patel, Jaimin D. Bhatt, Ritu B. Dixit, Chaitanya J. Chudasama, Bhavesh D. Patel, Bharat C. Dixit

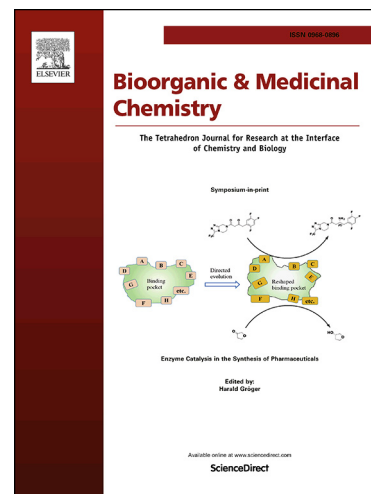
PII: S0968-0896(19)30579-6
DOI: <https://doi.org/10.1016/j.bmc.2019.06.038>
Reference: BMC 14975

To appear in: *Bioorganic & Medicinal Chemistry*

Received Date: 10 April 2019
Revised Date: 19 June 2019
Accepted Date: 22 June 2019

Please cite this article as: Patel, T.S., Bhatt, J.D., Dixit, R.B., Chudasama, C.J., Patel, B.D., Dixit, B.C., Green synthesis, biological evaluation, molecular docking studies and 3D-QSAR analysis of novel phenylalanine linked quinazoline-4(3*H*)-one-sulphonamide hybrid entities distorting the malarial reductase activity in folate pathway, *Bioorganic & Medicinal Chemistry* (2019), doi: <https://doi.org/10.1016/j.bmc.2019.06.038>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Highlights

- Synthesis of quinazolin-4(3*H*)-one as predominantly *E*-stereoisomer from amino acid
- Phenylalanine linked quinazolinones were synthesized using [Bmim][BF₄]-H₂O as media
- *In vitro* Antimalarial screening of quinazolinones and their DHFR inhibitory potency
- 3D-QSAR and *In silico* study of targets quinazolinone entities for lead optimization
- Molecular docking of potent 4(3*H*)-quinazolinones at the binding site of DHFR enzyme