Accepted Manuscript

Synthesis, anti-proliferative and genotoxicity studies of 6-chloro-5-(2-substituted-ethyl)-1,3-dihydro-2*H*-indol-2-ones and 6-chloro-5-(2-chloroethyl)-3-(alkyl/ary-2-ylidene)indolin-2-ones

Gangadhar Y. Meti, Atulkumar A. Kamble, Ravindra R. Kamble, Shilpa M. Somagond, H.C. Devarajegowda, Sandhya Kumari, Guruprasad Kalthur, Satish K. Adiga

PII: S0223-5234(16)30416-0

DOI: 10.1016/j.ejmech.2016.05.028

Reference: EJMECH 8620

To appear in: European Journal of Medicinal Chemistry

Received Date: 11 January 2016

Revised Date: 11 May 2016

Accepted Date: 11 May 2016

Please cite this article as: G.Y. Meti, A.A. Kamble, R.R. Kamble, S.M. Somagond, H.C. Devarajegowda, S. Kumari, G. Kalthur, S.K. Adiga, Synthesis, anti-proliferative and genotoxicity studies of 6-chloro-5-(2-substituted-ethyl)-1,3-dihydro-2*H*-indol-2-ones and 6-chloro-5-(2-chloroethyl)-3-(alkyl/ary-2-ylidene)indolin-2-ones, *European Journal of Medicinal Chemistry* (2016), doi: 10.1016/j.ejmech.2016.05.028.

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.



GRAPHICAL ABSTRACT

Synthesis, anti-proliferative and genotoxicity studies of 6-chloro-5-(2substituted-ethyl)-1,3-dihydro-2*H*-indol-2-ones and 6-chloro-5-(2chloroethyl)-3-(alkyl/aryl-2-ylidene)indolin-2-ones

Gangadhar Y. Meti^a, Atulkumar A. Kamble^b, Ravindra R. Kamble^b*, Shilpa M. Somagond^b, H. C. Devarajegowda^c, Sandhya Kumari^d, Guruprasad Kalthur^d, Satish K. Adiga^d

A series of 6-chloro-5-(2-substituted-ethyl)-1,3-dihydro-2*H*-indol-2-ones (**3a-h**) and 6-chloro-5-(2-chloroethyl)-3-(alkyl/aryl-2-ylidene)indolin-2-ones (**5i-x**) were synthesized. Compounds **3a-e**, **5i-l** and **5q-r** were selected by NIH, USA for *in vitro* anti-proliferative screening. Based on the impressive growth inhibitory (GI %) effect, the compounds **3a-b** and **3e** were further analyzed for anti-proliferative (at 5 dose concentration) and genotoxic activity and they have shown growth inhibition in the range 1.22 to 76.30, 2.85 to 76.03 and 10.98 to 82.05 respectively at 10^{-5} M concentration.



Download English Version:

https://daneshyari.com/en/article/7798247

Download Persian Version:

https://daneshyari.com/article/7798247

Daneshyari.com