Available online at www.joac.info

ISSN: 2278-1862

Journal of Applicable Chemistry

2014, 3 (6): 2384-2392

(International Peer Reviewed Journal)

Synthesis and Molecular Docking Study of Novel Pyrazolo[3,4-*b*]quinoline Derivatives

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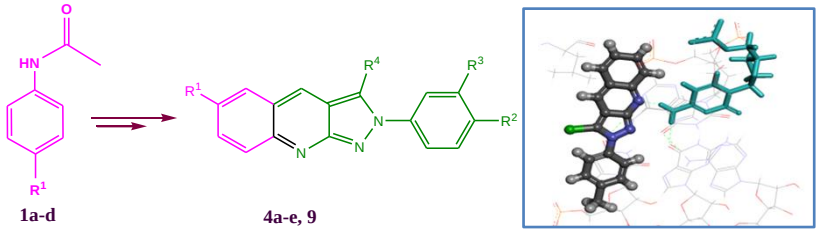
Accepted on 10th October 2014

ABSTRACT

*Phenylpyrazolo[3,4-b]quinolin-3-ols were prepared by using 2-chloroquinoline-3-carboxylic acids and phenyl hydrazine hydrochlorides in the presence of $POCl_3$. One of the phenylpyrazolo[3,4-b]quinolin-3-ols underwent chlorination (**9**). To check binding modes and binding affinity of synthesized compounds were docked with the active sites of human telomerase (hTERT). The results indicated that compound **4b** has good affinity to the active site residue of human telomerase, least energy (-23.012 score).*



Keywords: Phenylpyrazolo[3,4-*b*]quinolin-3-ols, 3-Chloro-2-*p*-tolyl-2*H*-pyrazolo[3,4-*b*]quinoline, $POCl_3$, Molecular Docking Studies.