Articles

Synthesis of Novel Quin[1,2-b]Acridines: *In Vitro* Cytotoxicity and Molecular Docking Studies

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Abstract

An attempted synthesis of 5-aryl-6,7-dihydrodibenzo[*b,j*][1,10]phenanthroline derivatives from 2,3-dihydroacridin-4(*1H*)-ones with 2-aminocarboxylic acid derivatives in presence of phosphorus oxychloride at 130˚C yielded a novel class of quin[1,2-*b*]acridine derivatives. The newly synthesized compounds showed a better cytotoxic activity against HeLa and MCF-7 cell lines during the structure–activity relationship

(SAR) studies. To discover with the interactions of these molecules, we carried out molecular docking studies using the human protein kinase CK2 inhibitors. The