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BAICALEIN DERIVATIVES AS PROMISSING ANTICANCER AGENTS

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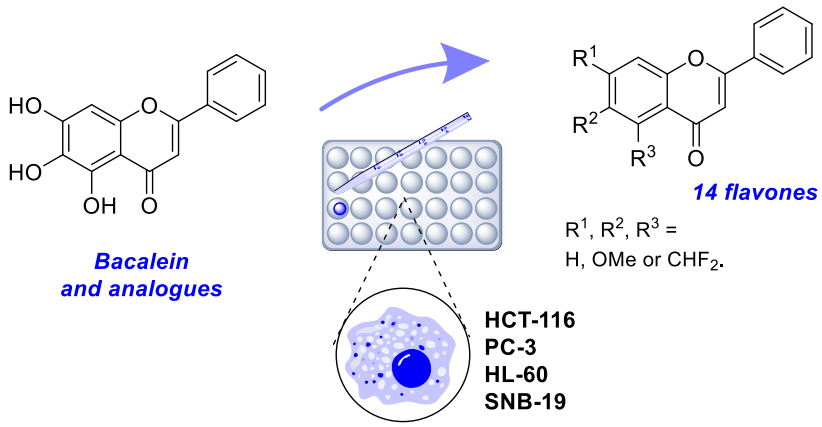
ABSTRACT

Baicalein is a natural flavone from *Scutellaria baicalensis* that exhibits antiproliferative activity in the micromolar range against human colon adenocarcinoma cell lines (SW480, HT-29, DLD-1)[1,2]. Thus, baicalein presents a promising scaffold for the design of new flavones with different substitution patterns for the evaluation of anticancer activity and structure-activity relationship (SAR) studies. The method consisted of modifications of baicalein and its analogues in different methoxylated and difluoromethylated patterns in the flavone A ring[3,4]. Fourteen baicalein derivatives were synthesized with yields ranging from 40 to 99%. These compounds will be evaluated for potential anticancer activity in HCT-116, PC-3, HL-60 and SNB-19 cell lines and investigation of the mechanism of action and SAR studies.



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