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Synthesis and antitumor activities of novel succinamic acid derivatives by potato disc assay

Hadizadeh F. 1,2, Moradi A.1, Naghibi G.1, Vojdani M.1, Ramezani M.1,2

In view of potential biological activities of some succinic acid derivatives, we synthesized some novel N-[4-(morpholine-4-sulfonyl)-phenyl]-succinamic acid [1a-d] and N-(4-benzylsulfamoyl-phenyl)-succinamic acid [2a-d] derivatives as antitumor agents. The antitumor activity of compounds was studied using the potato disk bioassay technique. Among these N-Benzyl-N'-(4-benzylsulfamoyl-phenyl)-succinamide [2c] and N-Benzyl-N'-[4-(morpholine-4-sulfonyl)-phenyl]-succinamide[1c] exhibited significant inhibition of crown gall tumors caused by Agrobacterium tumefaciens at 10 microgram/ml concentration. The activity of compounds was comparable to that of vincristine.

¹Biotechnology & Pharmaceutical Sciences Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

²Pharmacy Faculty, Mashhad University of Medical Sciences, Mashhad, Iran fhadizadeh@yahoo.com