

Design and synthesis and biological evaluation of novel curcumin analogs with anticipated anticancer activity

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Abstract

Extensive research conducted within past years revealed that curcumin is a highly pleiotropic molecule that interacts with a diverse range of molecular targets and hence it possess anti-proliferative activities against tumor cells. The great similarities between curcumin analogs and chalcones inspired their testing against tubulin enzyme activity as recent research revealed that chalcones possess cytotoxic activity associated with tubulin inhibition and interference with microtubule formation, which is essential in mitosis and cell replication.

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