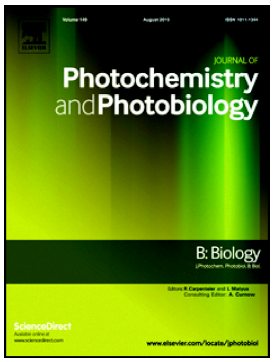

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Regio- and stereoselective synthesis of new spirooxindoles via 1,3-dipolar cycloaddition reaction: Anticancer and molecular docking studies

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Abstract

Owing to their structural novelty and inherent three-dimensionality, spiro scaffolds have been shown indisputable promise as chemopreventive agents. A new series of heterocycles containing spirooxindole and pyrrolidine rings were synthesized by the 1,3-dipolar cycloaddition of an azomethine ylide, which was generated *in situ* by the condensation of a secondary amino acid (L-proline) and dicarbonyl compounds (isatin), with dipolarophiles. This method is simple and provides diverse and