

Biological Evaluation and Docking Studies of Biscoumarin Derivatives as Anticancer Agents on Human Osteogenic Sarcoma Cells

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SUMMARY. The synthesis and characterization of two novel biscoumarin derivatives (**1** and **2**) were realized by means of IR, ¹H NMR, HRMS and single crystal X-ray crystallography. The anticancer activity of the two compounds were investigated against four human osteogenic sarcoma cells (143B, U2OS, Saos2 and Mg63) by MTT assay. Furthermore, molecular docking studies supported the biological assay data and suggested that **2** may be a potential anticancer agent.

RESUMEN. La síntesis y caracterización de dos nuevos derivados de biscumarina (**1** y **2**) se realizaron mediante IR, ¹H RMN, HRMS y cristalografía de rayos X de cristal único. La actividad anticancerígena de los dos compuestos se investigó contra cuatro líneas celulares de sarcoma osteogénico humano (143B, U2OS, Saos2 y Mg63) mediante ensayo de MTT. Además, los estudios de acoplamiento molecular respaldaron los datos del ensayo biológico y sugirieron que **2** podría ser un potencial agente anticancerígeno.

KEY WORDS: biscoumarin, molecular docking, osteogenic sarcoma, X-ray.

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