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Synthesis of Pyran-Annulated Heterocycles Derivatives and Evaluation of Their Anti-Osteosarcoma Activity

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SUMMARY. Three novel pyran derivatives (**1**-**3**) were synthesized and characterized via IR, 1H NMR, HRMS, and single crystal X-ray crystallography. The anti-osteosarcoma activities of the three compounds were investigated against three human osteoma sarcomatosum cells (MG-63, U-2 OS, and HOS) by MTT assay. The results showed that compared with compounds **1** and **2**, compound **3** exerted rather potent activities against the three cell lines.

RESUMEN. Tres nuevos derivados de pirano (**1**-**3**) se sintetizaron y caracterizaron mediante IR, 1H RMN, HRMS, y cristalografía de rayos X monocristal. Fue investigada la actividad contra el osteosarcoma de los tres compuestos contra células humanas de tres osteoma sarcomatosum (MG-63, U-2 OS y HOS) mediante el ensayo de MTT. Los resultados mostraron que en comparación con los compuestos **1** y **2**, el compuesto **3** ejerce actividad más potente contra las tres líneas celulares.

KEY WORDS: anti-osteosarcoma, crystal, pyran.

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