

## Synthesis and Evaluation of Tetrahydroisoquinoline Derivatives against Human Hepatoma Carcinoma Cell Lines

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**SUMMARY.** Four novel tetrahydroisoquinoline derivatives (1-4) were synthesized and characterized via IR, <sup>1</sup>H NMR, HRMS, and single crystal X-ray crystallography. In addition, the antitumor effects of the four compounds were studied on five human hepatoma carcinoma cell lines including HHCC, HB611, BEL-7402, SMMC-7721, and PLC/PRF/5. The results showed that compared with compounds 1 and 2, compounds 3 and 4 displayed efficient antitumor activity.

**RESUMEN.** Cuatro nuevos derivados de tetrahidroisoquinolina (1-4) se sintetizaron y caracterizaron mediante IR, <sup>1</sup>H NMR, HRMS, y cristalografía de rayos X monocristal. Además, los efectos antitumorales de los cuatro compuestos se estudiaron en cinco líneas celulares de carcinoma de hepatoma humano: HHCC, HB611, BEL-7402, SMMC-7721 y PLC/PRF/5. Los resultados mostraron que en comparación con los compuestos 1 y 2, los compuestos 3 y 4 muestran la actividad antitumoral más eficaz.

**KEY WORDS:** crystal, hepatoma carcinoma cell, tetrahydroisoquinoline.

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