



Synthesis and Anti-Liver Cancer Activity of a Novel Heterocycles Compound

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SUMMARY. A new heterocycles compound (S)-2-(1-amino-propyl)-5-fluoro-3-phenyl-3H-quinazolin-4-one trifluoroacetate (**1**), designed using 2-fluoro-6-nitro-benzonic acid (**2**) as start material, was successfully obtained via multiple synthesis route and finally characterized by IR, ¹H NMR, and single crystal X-ray crystallography. In addition, *in vitro* anticancer activity of the title compound (**1**) on three human liver cancer cells (HCCLM3, SMMC-7721 and HB611) was further determined.

RESUMEN. Un nuevo compuesto heterocíclico, trifluoroacetato de (S)-2 (1-amino-propil)-5-fluoro-3-fenil-3H-quinazolin-4-ona (**1**), diseñado usando ácido 2-fluoro-6-nitro- (**2**) como material de partida, se obtuvo satisfactoriamente por vía de síntesis múltiple y finalmente se caracterizó por IR, ¹H RMN y cristalografía de rayos X de cristal único. Además, se determinó adicionalmente la actividad anticancerígena *in vitro* del compuesto del título (**1**) en tres líneas celulares de cáncer de hígado humano (HCCLM3, SMMC-7721 y HB611).

KEY WORDS: anti-liver cancer activity, novel heterocycles compound, synthesis.

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