

New Chloroquine Analogues as Antiviral Agents

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SUMMARY. Rhinoviruses and Enteroviruses (polio, coxsackie, echovirus) are the two types of picornaviruses responsible for the high number of human viral infections as the common cold. Structure Activity Relationship data about antiviral agents indicate the nitrogenated heterocycles are present in several active compounds. Considering the antiviral activity of chloroquine, used as standard drug for the Coxsackievirus B-3, two new analogues were synthesized and evaluated as antiviral agents: N⁴-(3-methyl-1-phenyl-1H-pyrazolo[3,4-b]pyridine)-N¹,N¹-diethyl-1,4-pentanediamine [1] and N⁴-(quinaldine)-N¹,N¹-diethyl-1,4-pentanediamine [2]. The compound [1] showed *in vitro* antiviral activity against Coxsackievirus.

RESUMEN. "Nuevos Análogos de la Cloroquina como Agentes Antivirales". Rinovirus y Enterovirus (polio, coxsackie, echovirus) son los dos tipos de picornavirus responsables del alto número de infecciones virales en humanos como el resfrío (o la gripe). Datos de Relación Estructura Actividad sobre antivirales indica que los heterociclos nitrogenados están presentes en la mayoría de los compuestos activos. Considerando la actividad antiviral de cloroquina, usada como droga estándar para el Coxsackievirus B-3, se sintetizaron y evaluaron dos análogos como agentes antivirales: N⁴-(3-metil-1-fenil-1H-pirazolo[3,4-b]piridina)-N¹,N¹-dietil-1,4-pentanediamina [1] y N⁴-(quinaldina)-N¹,N¹-dietil-1,4-pentanediamina [2]. El compuesto [1] mostró actividad *in vitro* contra Coxsackievirus.

KEY WORDS: Antiviral agents, Chloroquine, Coxsackievirus, Heterocycles.

PALABRAS CLAVE: Antivirales, Cloroquina, Coxsackievirus, Heterociclos.

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