

## A Co(II)-Schiff Base Complex: Application Values on Acute Pneumonia in Children

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**SUMMARY.** In the present study, a new Co(II)-Schiff base complex, [Co(L)<sub>2</sub>] (1), [Schiff base (HL) = 2-(2-methoxybenzylideneamino)phenol] has been successfully prepared by reaction of Co(II) chloride hexahydrate with the Schiff base ligand HL in a mixed solvent of aqueous-methanolic solution via a slow evaporation synthesis method. For the treatment of acute lung injury, the content of inflammatory cytokines TNF- $\alpha$  and IFN- $\gamma$  released into the alveolar lavage fluid after compound treatment was measured with ELISA assay. Then, the real time RT-PCR was carried out and the activation levels of the prolyl carboxypeptidase in the alveolar epithelial cells was determined.

**RESUMEN.** En el presente estudio, se ha preparado con éxito un nuevo complejo de base de Co(II)-Schiff, [Co(L)<sub>2</sub>] (1), [base de Schiff (HL) = 2-(2-metoxibencilidenamino)fenol] mediante la reacción de cloruro de Co(II) hexahidratado con el ligando de base de Schiff HL en un disolvente mixto de solución acuoso-metanólica mediante un método de síntesis de evaporación lenta. Para el tratamiento de lesión pulmonar aguda, el contenido de citocinas inflamatorias TNF- $\alpha$  e IFN- $\gamma$  liberadas en el líquido de lavado alveolar después del tratamiento con compuesto se midió con ensayo ELISA. Luego, se realizó la RT-PCR en tiempo real y se determinaron los niveles de activación de la proil carboxipeptidasa en las células epiteliales alveolares.

**KEY WORDS:** acute lung injury, coordination complex, Co(II) complex, RT-PCR, Schiff base ligand,

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