

# Tumor Necrosis Factor- $\alpha$ Production-Enhancing Properties of Novel Adamantylalkylthio Derivatives of Some Heterocyclic Compounds

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Certain adamantylated heterocycles were previously shown to enhance the secretion of tumor necrosis factor alpha (TNF- $\alpha$ ) by murine melanoma cells that have been transduced with the gene for human TNF- $\alpha$  and constitutively expressed this cytokine. The stimulatory potency of those compounds depended, among other factors, on the structure of the linker between the adamantyl residue and the heterocyclic core. In the present study, a series of (1-adamantyl)alkylsulfanyl derivatives of heterocyclic compounds was prepared by alkylation of the corresponding thioheterocycles. Of the novel adamantylalkylthio compounds tested in the aforementioned cell line, 2-(2-adamantan-1-yl-ethylsulfanyl)-4-methyl-pyrimidine was found to be the most active.

*Key words:* TNF- $\alpha$ , Adamantylated Pyridines, Adamantylated Pyrimidines, Cytotoxicity