

Effect of Actinomycin D on Cell *in vitro*

Alzbeta Hudakova

*Department of Zoology, Faculty of Natural Sciences, Comenius University, Mlynská dolina
842 15, Bratislava, Slovakia
Fax: 427 729 064*

KEYWORDS Actinomycin D *in vitro*. V 79B Cell Line Cell Cycle. Colony Forming Assay. Proliferation

ABSTRACT The effect of Actinomycin D was studied on synchronized V 79B Chinese hamster lung cell *in vitro* during the whole cell cycle by the colony forming assays and by the proliferative cell activity. The cells most susceptible were in the G₁ phase, at the beginning of the S phase and in the mitotic phase, of the cell cycle. The minimal effective dose of Actinomycin D was 0.75 µg per liter which inhibited colony forming ability and proliferative cell activity during the whole cell cycle. Lower concentrations (0.5 and 0.1 µg Actinomycin D per liter) caused inhibition of colony forming ability only when applied in G₁ phase, at the beginning of the S phase, and in the middle of M phase.