## 마황 에탄올 추출물에 의한 SK-MEL2 세포의 멜라닌생성 억제효과

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Inhibitory Ethanol Extract of *Ephendra sinica* on Melanogenesis in SK-MEL2 Research Center for Oral Disease Regulation of the Aged, School of Dentistry, Chosun University. Department of Biotechnology, Chosun University.

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## **Objectives**

The purpose of study is to investigate the ethanol extract of *Ephedra sinica* and their dermal properties related to skin-whitening

## Materials and Methods

Using SK-MEL2 Melanin cells, we measured depigmentation effect of the ethanol extract of *Ephedra sinica*. in this work, tyrosinase activity and melanin inhibitory effect were measured to confirm the Whitening effect.

## Results

The ethanol extract of *Ephedra sinica* showed inhibitory effect on tyrosinase(57.7%). SK-MEL2 incubated whit the ethanol extract of *Ephedra sinica* showed reduces melanin formation and tyrosinase activity. The ethanol extract of *Ephedra sinica* alone markedly suppressed melanin content and tyrosinase activity.

These results suggest that the ethanol extract of *Ephedra sinica was* candidates for skin-whitening cosmetic application

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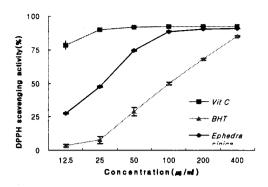


Fig. 1. DPPH radical scavenging activity of ethanol extracts from *Ephedra sinica* 

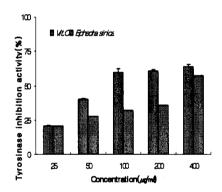


Fig. 2. Inhibitory effects of ethanol extracts of *Ephedra sinica* on tyrosinase inhibitory

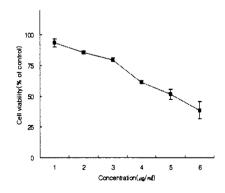


Fig. 3. Effect of *Ephedra sinica* on the viability of SK-MEL2 melanoma cells. The viability of the cells was

measured by MTT assay. Results expressed as% control

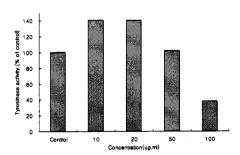


Fig. 4. Inhibitory effect of *Ephedra* sinica on tyrosinase activity in SK-MEL2 melanoma cells. Tyrosinase activity were measured at 405nm. Results were expressed as% control

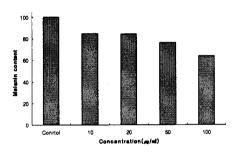


Fig. 5. Inhibitory effect of *Ephedra* sinica on melanin content in SK-MEL2 melanoma cells. Melanin content were measured at 405nm. Results were expressed as% control