

**EFFICACY EVALUATION OF THE WHITENING COSMETICS
USING MELANOGENESIS INHIBITION ASSAY IN B-16
MELANOMA CELL**

S. J. Yang¹, S. J. Jang¹, S. S. Choi¹, J. Y. Jang¹, K. H. Son¹, J. P. Lee¹, K. S.
Lee¹, M. Y. Heo² and Y. O. Kim¹

¹ *Drug Evaluation Department, Korea Food and Drug Administration, Seoul,
122-704, Korea*

² *College of Pharmacy, Kangwon National University, Chuncheon, Korea*

We investigated the inhibitory effect of whitening materials with growth factor or alone on melanomas derived from Human (B-16) and mouse (SK-MEL-31) using melanin content. Melanin content was determined by the absorbance value at 470nm per cells. we used the growth factors known as activators of Adenylate cyclase, Protein kinase C and tyrosine kinase pathway separately. In addition, we compared the action of UV-induced with non-biological growth factor with whitening materials in melanomas derived from Human and mouse. The results showed that the aspect of inhibitory effect of whitening materials on B16 and SK-MEL-31 was not different. And, the action of each growth factor involved in the differentiation and proliferation of melanoma on the inhibition of melanogenesis in B-16 and SK-MEL-31 using whitening agents showed no difference. Also, The action of UV-induced and non-biological growth factors didn't exhibit different pattern on the effect of whitening agent in B-16 and SK-MEL-31.