

Optimization of culture media on Organ Culture of Human Scalp Hair Follicle.

Bo-Young Yoo¹, Hee-Hoon Yoon¹, Doo-Hoon Lee^{1,4}, Young-Kwon Seo¹, Youn-Ho Shin¹,
Kye-Yong Song², Sung-Joo Hwang³, Young-Jin Kim⁴, Eun-Kyung Yang⁵,
Chang-Seo Park⁶, Ih-Seop Chang⁷, and Jung-Keug Park^{1*}

¹Department of Chemical and Biochemical Engineering, Dongguk University, ²Department of Pathology, Chung-Ang University, ³Hair Hair Clinic, ⁴Biomedical Research Center, Lifecord. Co.

⁵R&D Center, Bioland. Ltd. ⁶Biotech Research Lab., Doosan. Ltd.,

⁷R&D Center, Amore Pacific. Ltd.

TEL : +82-2-2260-3365 FAX : 82-2-2271-3489

Abstract

The recent development of methods for culturing hair follicles *in vitro* has proved an important tool to investigate many aspects of drug screening.

Human hair follicle is composed of multiple types of cells, whose interactions regulate morphology and cycling-anagen, catagen, and telogen. The hair follicle undergoes cycle of growth(anagen), regression(catagen), and rest(telogen) phase.¹⁾ When anagen, the nourishment supply reclaimed and the artery comes to be smooth at the dermal papilla, hair follicle produce hair shaft by interaction between DP and the contiguous cells. During catagen, the growth of hair follicle stop as artery to be connected hair follicle are degenerated.

As *in vitro* compared with *in vivo* nutrient supply is deficient, we cultured hair follicle using nutrient enriched media. To observe the effects of media, we measure hair growth rate, perform immunohistochemical staining and compared the expression pattern of these markers between anagen and catagen phase.²⁾

References

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