

Development of organ culture media for human hair follicle

유보영, 박정극*
동국대학교 생명화학공학과
(jungkeug@empal.com*)

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. 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.