

Characterization of *IGFBP-5* Gene Expression in Follicles of Embryonic and Adult Inner Mongolia Cashmere goat (*Capra hircus*) - Liu zhihong, Li jinquan, Zhang wenguang, Yin jun and Zhang yanjun. Inner Mongolia Key Laboratory of Animal Genetics , breeding and reproduction, College of Animal Science and Medicine, Inner Mongolia Agriculture University, Huhehot 010000, China.

The remarkable difference between cashmere and wool is the hair shaft structure. This work is to study the expression of *IGFBP-5* in both primary and secondary hair follicles at day 105 during the embryonic period and the adult anagen of Inner Mongolia Cashmere goat, at both stages the cashmere grows quickly. Our result shows that, in the adult anagen, *IGFBP-5* is expressed at the hair cortex and hair matrix in primary hair follicles, and at the hair cortex, hair matrix and the part of hair bulb near the hair shaft in secondary hair follicles; And at days 105 during the embryonic period, *IGFBP-5* is weakly expressed in internal root sheath in primary hair follicles, but is highly expressed at the hair cortex, hair matrix and the part of hair bulb near the hair shaft in secondary hair follicles. These data suggest that *IGFBP-5* may play an essential role in hair development.