regulated during the transformation process is likely to be affected by the activity of SRF.

Conclusion Geminin played an important role in the phenotype transformation of VSMCs, perhaps by affecting the activity of SRF.

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ROLE OF GEMININ IN MEDIATING PHENOTYPE TRANSFORMATION OF VASCULAR SMOOTH MUSCLE CELLS IN RATS

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Objective To investigate the effect of Geminin on the phenotype transformation of VSMCs in rats.

Methods (1) Both phenotypes were obtained after serum stimulation, and different biological function were detected induced by acetylcholine. (2) The phenotypic markers and the expression of Geminin were measured by Western blot and RT-PCR. (3) The effects of Geminin gene silencing SRF expression and the phenotypic markers were investigated.

Results (1) After serum stimulation, VSMCs transformed from contractile phenotype into synthetic one; The mrna and protein of Geminin enhanced gradually, indicating Geminin gene involved in the phenotypic transformation of VSMCs. (2) Geminin gene silencing resulted in the significant increase of the contractile markers and the decrease of the synthetic ones, which further demonstrate that Geminin participated in the phenotypic transformation of VSMCs. (3) Geminin gene silencing induced the decline of SRF, implied that Geminin