

ANDROGEN RECEPTOR IN TESTIS

Summary

Testosterone is synthesized in both human and animal Leydig cells, and then passes through the inner membrane of these cells into the bloodstream. Androgens penetrate the inner membrane of all cells, acting only in cells that contain receptors, located in the cytoplasm or in the nucleus of the target cell. Androgen receptors, located in all somatic cells of male gonads, play an essential role in sper-

matogenesis, being necessary for its proper course. Knocking out androgen receptor gene in all somatic gonadal cell in males results in female external genitalia, cryptorchidism, reduced gonads and reduced body weight. Androgen receptors are located in Sertoli cells, Leydig cells and peritubular-myoid cells. Presence of androgen receptors in Sertoli cells is vary and depends on the stage of the seminal tubules.