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## JOURNAL ARTICLE

# Differential expression of clusterin in the testis and epididymis of postnatal and germ cell deficient mice

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Clusterin is found in a wide variety of tissues and is expressed in a number of physiological and pathological contexts. It is expressed constitutively in the adult male reproductive tract, specifically the testes and caput of the epididymis. The gene is also induced during apoptotic cell death in the kidney and hormone-dependent tissues such as the prostate and mammary gland. The mechanisms controlling the expression of clusterin gene expression in these tissues are still unknown, although it has been suggested that interactions between the Sertoli cells and germ cells in the testis, or epithelial cells and germ cells in the epididymis, may be required for clusterin expression. To investigate the importance of germ cells in the induction of clusterin expression in these tissues, we have used *in situ* hybridization to determine the developmental regulation and germ cell dependence of clusterin expression in the reproductive tract of the normal and germ cell deficient male mice. Clusterin mRNA is present in the supporting cells in the testes of normal mice and in both atrichosis (*at*) and dominant spotting mutant (*Wv*) mice, both of which are germ cell deficient. On the other hand, the expression of clusterin in the epididymis appears to be at least partially dependent of the presence of germ cells, because segmental localization of clusterin mRNA within the caput of the epididymis that is seen in normal mice is disrupted in the *at* and *Wv* mutants. In these germ cell deficient mutants, the steady-state level of clusterin mRNA, which is repressed in segment 1 and 2 of the adult wild type mouse, is expressed at levels similar to those seen at days 7 and 17 during the development of the normal epididymis.

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