

Pure Sertoli Cell Cultures: A New Model for the Study of Somatic-Germ Cell Interactions

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A new technique involving a brief hypotonic treatment was developed for obtaining pure rat Sertoli cell cultures. This method for the selective removal of the germ cells present in Sertoli cell enriched cultures (SCEC) is based on the differential response of the two cell types to changes in osmolarity. It was found that the optimal conditions for germ cell detachment without Sertoli cell impairment consist of incubation for 2.5 minutes at 20 C in 20 mM TRIS-HCl. When compared with SCEC, the Sertolicell-only cultures (SCOC) thus obtained retain unaltered morphologic features and responsiveness to FSH stimulation (morphologic modifications and 17 β -estradiol secretion). The availability of pure Sertoli cell cultures (ie, free of contaminating germ cells) provides an advantage in the study of their metabolic activity. Moreover, with this technique it is feasible to compare Sertoli cell function in association with germ cells to function in the absence of germ cells.

Key words: cell cultures, Sertoli cell, germ cell

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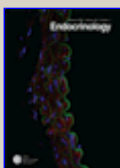


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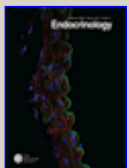
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