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Improving the quality of ovine embryo produced in vitro by culturing zygote in isolated mouse oviduct

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Highlights

- Immature slaughterhouse-derived ovine oocytes after IVM/IVF developed to blastocyst stage successfully in organ cultured isolated mouse oviduct.
- Blastocyst yield in isolated mouse oviduct was comparable to chemically semi-defined medium.
- Isolated mouse oviduct could increase the cryotolerance of resulting blastocysts.
- the benefits of zygotes culture in isolated mouse oviduct on developed embryos reflected in viability markers, such as inner cell mass:trophectoderm (ICM:TE) cell ratios.

Abstract

Several studies indicate the absence of oviduct or its assistance may compromise the developmental competence and quality of the embryos produced in vitro. This study was aimed to evaluate the quality of embryos produced in vitro by culturing zygotes in isolated mouse oviduct and oviduct epithelial cell

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