TECHNOLOGY FACT SHEET

Method to Isolate Embryonic Stem Cells

Adelaide Research & Innovation

Description of Technology

The invention describes a method to efficiently isolate embryonic stem (ES) cells from preimplantation mammalian embryos. Using a method whereby an embryo is implanted into a feeder layer of cells and cultured under special conditions, a high level of efficiency of primary culture establishment can be achieved without the use of mechanical separation techniques which are currently employed to isolate pluripotent stem cells.

Patent Status

This technology is covered by an international (PCT) application.

Commercial Applications

The efficient isolation of ES cells is of great importance in the development of the use of stem cells as a platform technology. The efficiency of this isolation method is believed to be sufficient to derive primary cultures from a single preimplantation embryo without the need for surgical isolation of the pluripotent component. Further, as this isolation method uses a defined culture medium, it makes this technique more attractive to researchers and commercial entities from a quality control and a regulatory point of view.

Partnership Opportunities

We are looking to license this technology to partners interested in adopting this technique for their own research and development programs and/or collaboration for the further development and refinement of this technique.

The efficiency of this isolation method is believed to be sufficient to derive primary cultures from a single preimplantation embryo without the need for surgical isolation of the pluripotent component.

Key People

A/Prof Mark Nottle
Discipline of Obstetrics and Gynaecology.

THE UNIVERSITY OF ADELAIDE AUSTRALIA

SUB CRUCE LUMEN

Contact:
Dr Matthew Chong
Commercial Development
Adelaide Research & Innovation
GPO Box 149, Rundle Mall
Adelaide SA 5000 Australia
Tel: +61 8 8303 5020
Fax: +61 8 8303 4355
Email: matthew.chong@adelaide.edu.au