

发育生物学

[In Vitro Production of Bovine Embryos](#) (P.J. Hansen Lab, Dept. of Animal Sciences, University of Florida)

This protocol describe procedures for in vitro production [IVP; i.e. in vitro maturation (IVM), in vitro fertilization (IVF), and in vitro culture (IVC)]of embryos

[Mini-Chamber for regulating gaseous environment during culture](#) (P.J. Hansen Lab, Dept. of Animal Sciences, University of Florida)

A simple and inexpensive chamber for regulating gaseous environment of small culture plates, such as those used for culture of preimplantation embryos, can be constructed using disposable media-filtration devises such as Corning's 115-ml system. The following is a description of how to make such a device

[Cell number counting in preimplantation embryos](#) (P.J. Hansen Lab, Dept. of Animal Sciences, University of Florida)

A simple procedure for determining cell number in preimplantation embryos. While the procedure is written for fixed embryos, fixation is optional since the Hoechst 33342 and 4',6-diamidino-2-phenylindole, dihydrochloride (DAPI) penetrate living cells. The fixation step is useful when embryos will be stored for several weeks before determination of cell number

[TUNEL procedure for preimplantation embryos](#) (P.J. Hansen Lab, Dept. of Animal Sciences, University of Florida)

A protocol for detecting cell death using TUNEL.

[Whole mount TUNEL analysis of Xenopus embryos](#) (Peter Vize, Xenopus Molecular Marker Resource)

[Lineage Analysis Using Retrovirus Vectors](#) (Cepko Lab, Department of Genetics, Harusr/locald Medical School and Howard Hughes Medical Institute,)

Describe the use of replication-incompetent retroviral vectors for the analysis of lineal relationships in developing vertebrate tissues.