BTX Applications

Tech-Trends

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Nuclear Transfer, SCNT and Hybridomas

Electrofusion – an efficient technique for nuclear transfer and hybridomas

BTX the leader in electrofusion, has developed the ECM 2001, CE and ETL marked, electrofusion instrument.

Nuclear transfer applications until now resulted in low efficiency and low viability. The novel technique employing electrofusion to nuclear-transfer complexes improves both efficiency and viability. In short oocyte-cell couplets are aligned in a BTX fusion chamber by applying AC pulse. The fusion of the couplets is accomplished by applying two DC pulses, and a post-fusion AC pulse.

ECM® 2001 Electrofusion PROTOCOL

Electrofusion Settings:

Mode		manual
AC voltage		5 V
AC duration		5 sec
Field strength		60 V/cm
DC voltage		100 V
DC pulse length		15 µsec
Number of pulses	2	
Field Strength		2kV/cm
Post fusion AC duration		0 sec

Electrofusion Procedure:

Volume: 20ul
Temperature RT
Microslide preparation

1. Place microslide on the stage of dissecting microscope
2. Immerse microslide in 20-25 ml electrofusion solution
3. Press manual start button on the ECM 2001
4. Monitor cell alignment
5. Press manual start button to deliver DC pulse
6. Remove fused cells from microslide, wash them thoroughly with appropriate medium and place in culture

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