

Materials List for**Monitoring Blood Glucose in Mouse Offspring after Intracytoplasmic sperm injection - Embryo Transfer**Jianan Tang^{1,2,3}, Baoli Zhang^{1,2,3}, Chunhua Tang^{4,5,6}, Xuemei Wang^{1,2,3}, Minmin Hua^{1,2,3}, Yuchuan Zhou^{4,5,6}, Huijuan Shi^{1,2,3}, Tiancheng Zhang^{1,2,3}¹Shanghai-MOST Key Laboratory of Health and Disease Genomics²NHC Key Lab of Reproduction Regulation³Shanghai Institute for Biomedical and Pharmaceutical Technologies⁴International Peace Maternity and Child Health Hospital⁵School of Medicine, Shanghai Jiao Tong University⁶Shanghai Key Laboratory of Embryo Original DiseasesCorrespondence to: Huijuan Shi at shihuijuan2011@163.com, Tiancheng Zhang at ztctianna@163.comURL: <https://www.jove.com/video/66212>

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Materials

Name	Company	Catalog Number	Comments
1.25% avertin (2,2,2-tribromoethanol)	Nanjing Aibei	M2960	for anesthetization
Bacteriological Petri Dishes 35 x 10 mm style w/tight lid, crystal-grade virgin polystyrene, sterile	BD	353001	
Bacteriological Petri Dishes 50 x 9 mm style w/tight lid, crystal-grade virgin polystyrene, sterile	BD	351006	
Biosafety Cabinet	ESCO	class II BSC	Aseptic operations, making culture dishes, aliquoting reagents, etc.
CO2 Incubator	Thermo	8000DH	Embryo culture
Dissection Microscope	Olympus	SZX16	Use in mouse embryo transfer
Fluorinert FC-770	SIGMA	F3556	Fluorinert FC-770 is a thermally stable fully fluorinated liquid with high dielectric strength and resistivity, used as operating fluid
handheld glucometer	Roche	AccuChek performa	Blood glucose measurement
HTF	Merck	MR-070-D	The EmbryoMax Human Tubal Fluid (HTF) (1x), liquid designed for use with Mouse IVF is available in a 50 mL format and has been optimized and validated for Embryo Culture.
Hydraulic Microinjector	Eppendorf	CellTram 4r Oil, 5196000030	For sperm injection
Inverted Microscope	Nikon	TI2-U	Micromanipulation observation host
KSOM	Merck	MR-020P-D	(1x), Powder, w/o Phenol Red, 5 x 10 mL
M2	Merck	MR-015-D	EmbryoMax M2 Medium (1x), Liquid, with Phenol Red
Micromanipulator	NARISHIGE	NTX-N4	Micromanipulation arm
mineral oil	SIGMA	M8410	Mineral oil is suitable for use as a cover layer to control evaporation and cross-contamination in various molecular biology applications.
Needle Cutter	Nanjing Aibei	Sutter MF-800	Use for fabricating micromanipulation needles

Needle Puller	Nanjing Aibei	Sutter model p-100	Use for making micromanipulation needles
Piezo Drill Trip Mouce ICSI	Eppendorf	5195000.087	Application of ICSI injection needle.
Piezoelectric Micromanipulator (Membrane Breaker)	Eppendorf	Eppendorf PiezoXpert	Use of micro-pulses to break the zona pellucida and oolemma of the oocyte
Pneumatic Microinjector	Eppendorf	CellTram 4r Air, 5196000013	For fixing the oocyte
Ready-to-use Human Chorionic Gonadotropin (Hcg)	Nanjing Aibei	M2520	Sterilization reagent, intraperitoneal injection. 50 IU/mL
Ready-to-use Pregnant Mare's Serum Gonadotropin (PMSG)	Nanjing Aibei	M2620	Sterilization reagent, intraperitoneal injection. 50 IU/mL
Stereomicroscope	Olympus	SZX7	Oocyte retrieval and observation of embryo development