

Materials List for

## Chromosome Screening of Human Preimplantation Embryos by Using Spent Culture Medium: Sample Collection and Chromosomal Ploidy Analysis

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## **Materials**

Name	Company	Catalog Number	Comments
1.5 mL EP tube, 0.2 mL PCR tube	Axygen	MCT-150-C, PCR-02-C	DNase/RNase free, Low Binding PCR tubes and 1.5 mL micro- centrifuge tubes are recommended.
10 μL, 200 μL, 1000 μL DNase / RNase Free Tips	Axygen	T-300-R-S, T-200-Y-R-S, T-1000-B- R-S	This can be replaced by other brand/ For sample transfer
100 % ethanol	Sinopharm Chemical	10009218	This can be replaced by other brand/ For DNA library purification
Barcode Primer1-48	Yikon Genomics	Reagent in NICSInst library preparation kit	For library amplification
BD Falcon Organ Culture Dish, Sterile	BD Bioscience	363037	This can be replaced by other brand/ For embryo culture
BD Falcon Tissue culture Dishes (Easy Grip), Sterile	BD Bioscience	353001	This can be replaced by other brand/ For embryo culture
BD Falcon Tissue culture Dishes, Sterile	BD Bioscience	353002	This can be replaced by other brand/ For embryo culture
Cell Lysis Buffer	Yikon Genomics	Reagent in NICSInst library preparation kit	For culture medium pre-treatment
Cell Lysis Enzyme	Yikon Genomics	Reagent in NICSInst library preparation kit	For culture medium pre-treatment
ChromGo software	Yikon Genomics		Data analysis
CMPure Magbeads	Yikon Genomics	Reagent in NICSInst library preparation kit	For library purification
Cryotop open systerm	KITAZATO BioPharma	81110	This can be replaced by other brand/ For embryo vitrification
Distill water	Yikon Genomics	Reagent in NICSInst library preparation kit	To dissolve DNA
ES (Vitrification kit)	KITAZATO BioPharma	Reagent inVitrification kit	This can be replaced by other brand/ For embryo vitrification



HOLDNIG	ORIGIO	MPH-MED-35	This can be replaced by other brand/For ICSI
Hyaluronidase solution, 80 U/mL	SAGE	ART4007-A	This can be replaced by other brand/ Digest oocyte-corona-cumulus complex
ICSI	ORIGIO	MPH-35-35	This can be replaced by other brand/ For ICSI
Illumina MiSeq® System	Illumina	SY-410-1001	For library sequencing
Incubator	Labotect	Inkubator C16	This can be replaced by other brand/ For embryo culture
Library buffer	Yikon Genomics	Reagent in NICSInst library preparation kit	For library amplification
Library Enzyme Mix	Yikon Genomics	Reagent in NICSInst library preparation kit	For library amplification
Magnetic Stand	DynaMagTM-2	12321D	For library purification
Microscope	OLYMPUS	1X71	This can be replaced by other brand/ For embryo observation
Mini-centrifuge	ESSENSCIEN	ELF6	For separation
MT Enzyme Mix	Yikon Genomics	Reagent in NICSInst library preparation kit	For culture medium pre-treatment
NICSInst library preparation kit	Yikon Genomics	KT1000800324	Whole genome amplification and library construction
NICSInst Sample Prep Station	Yikon Genomics	ME1001003	Amplificate DNA
Nunc IVF 4-Well Dish	Thermo Scientific	144444	This can be replaced by other brand/ For embryo washing and blastocyst culture
Pasteur Pipette	Oirgio	MXL3-IND-135	This can be replaced by other brand/ For embryo tansfer
Pasteur pipettes	ORIGIO	PP-9-1000	This can be replaced by other brand/ For IVF laboratory
Pre-Lib Buffer	Yikon Genomics	Reagent in NICSInst library preparation kit	Pre-library preparation
Pre-Lib Enzyme	Yikon Genomics	Reagent in NICSInst library preparation kit	Pre-library preparation
Qubit® 3.0 Fluorometer	Thermo Scientific	Q33216	For library quantification
Quinn's Advantage Blastocyst Medium	SAGE	ART-1029	For embryo blastocyst stage culture
Quinn's Advantage Cleavage Medium	SAGE	ART-1026	This can be replaced by other brand/ For embryo cleavage stage culture
Quinn's Advantage Fertilization Medium	SAGE	ART-1020	This can be replaced by other brand/ For oocyte and sperm fertilization
Quinn's Advantage m-HTF Medium with HEPES	SAGE	ART-1023	This can be replaced by other brand/ For embryo clutrure
Quinn's Advantage SPS Serum protein Substitute Kit	SAGE	ART-3010	This can be replaced by other brand/ To denude the oocyte
Quinn's Advantage Tissue culture mineral oil	SAGE	ART-4008P	This can be replaced by other brand/ To cover the culture medium
STRIPPER TIPS	ORIGIO	MXL3-IND-135	This can be replaced by other brand/ For denudating granulosa cells
Vitrification Cryotop Open systerm	KIZTAZATO	81111	This can be replaced by other brand/ For embryo vitrification
Vitrification kit	KITAZATO BioPharma	VT101	This can be replaced by other brand/ For embryo vitrification
Vortexer	Qilinbeier	DNYS8	Sample mix
VS (Vitrification kit)	KITAZATO BioPharma	Reagent inVitrification kit	This can be replaced by other brand/ For embryo vitrification



ZILOS-tk Laser System	Hamilton Thorne	CLASS 1 laser	This can be replaced by other brand/
			For artificial blastocoele collapse