

Materials List for:

Using Mouse Oocytes to Assess Human Gene Function During Meiosis I

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Materials

Name	Company	Catalog Number	Comments
0.2 mL Seal-Rite PCR tube	USA Scientific	1602-4300	
1 kb DNA Ladder	Thermo Scientific	SM0313	
100 bp DNA Ladder	Thermo Scientific	SM0243	
6X DNA loading Dye	Thermo Scientific	R0611	
9-well glass spot plate	Thomas Scientific	7812G17	
Agarose	Sigma Aldrich	A9539	
Albumin from bovine serum	Sigma-Aldrich	A3294	
Alexa-fluor-568 conjugated anti-mouse IgG	Thermo Scientific	A21050	1:200 dilution
Alexa-fluor-633 conjugated anti-human IgG	Thermo Scientific	A21091	1:200 dilution
Ampicillin	VWR	AA0356	
Anti-vibration table	Technical Manufacturing Corp		any standard model
Anti-Acetylated Tubulin antibody	Sigma Aldrich	T7451	1:100 diution
Anti-centromeric (CREST) antibody	Antibodies Incorporated	15-234	1:30 dilution
Barrier (Filter) Pipette tips	Thermo Scientific	AM12635	Make sure compatable with your brand of pipettors. These are compatible with Eppendorf brand pipettors.
BD Difco Dehydrated Culture Media: LB Agar, Miller (Luria Bertani)	Fisher Scientific	DF0445-07-6	
BD Difco Dehydrated Culture Media: LB Broth, Miller (Luria Bertani)	Fisher Scientific	DF0446-07-5	
Capillary tubing	Sutter	B100-75-10	
Center Well organ culture dish	VWR	25381-141	
CO2 tank			For incubator
Confocal microscope	Zeiss		any standard model
Centrifuge (With cooling ability)	Thomas Scientific		any standard model
Cover Glass 11 x 22 mm	Thomas Scientific	6663F10	
Coverslips	Thomas Scientific	6663-F10	thickness will vary for particular microscopes
DAPI	Sigma Aldrich	D9542	
DEPC H2O	Life Technologies	AM9922	
Digital Dry Bath	Thermo Scientific	888700001	

Easy A high fidelity cloning enzyme	Agilent	600400	For DNA cloning
Enzymes for linearizing pIVT	New England Biolabs		NdeI or KsaI can be used
Ethidium Bromide	Thermo Scientific	155585011	
Fluorescent Microscope			Any Fluorescent microscope may be used
Formaldehyde (37%)	Thermo Fisher Scientific	9311	
Formaldehyde RNA loading dye	Ambion	8552	
Frosted Microscope Slides (Uncharged) 25X75 mm	Fisher Scientific	12-544-3	
Full Length cDNA Clones			Can be obtained from any vendor that supplies open reading frame clones
Gel electrophoresis apparatus	Bio-Rad		any standard model
Glass Pasteur Pipets	Fisher Scientific	13-678-200	
Globin Forward Primer for pIVT Construct			5'- GAA GCT CAG AAT AAA CGC -3'. Can be purchased from any company that generates custom oligonucleotides
Globin Reverse Primer for pIVT Construct			5'- ATT CGG GTG TTC TTG AGG CTG G -3' Can be purchased from any company that generates custom oligonucleotides
Holding pipettes	Eppendorf	930001015	Vacutip
Humidified Chamber			Tupperware can be used
Illustra Ready-To-Go RT-PCR beads	GE Life Sciences	27925901	
Incubator			any standard model with CO2 and water jacketed technology
Inverted Microscope	Nikon instruments		Any Standard model
Image J (NIH) Software	NIH		Image Analysis software
Lid of 96 well plate	Nalgene Nunc International	263339	
Low Adhesion 0.5 mL microcentrifuge tube	USA Scientific	1405-2600	
MacVector	MacVector		Sequence analysis software
MG132	Selleckchem	S2619	
Microscope slides	Fisher Scientific	12-544-3	
Millenium RNA Markers- Formaldehyde	Ambion	AM7151	
Milrinone	Sigma-Aldrich	M4659	Resuspend in DMSO at 2.5mM
Mineral Oil	Sigma-Aldrich	M5310	Only used embryo-tested, sterile-filtered
Monastrol	Sigma-Aldrich	M8515	Resuspend in DMSO at 100 mM
Mouthpiece	Biodiseno	MP-001-Y	
N2 tank			for antivibration table
Nail Polish; Clear			Any clear nailpolish can be used
NanoDrop Microvolume UV-Vis Spectrophotometer	Thermo Scientific		any standard model
NorthernMax 10X Denaturing Gel Buffer	Life Technologies	AM8676	
NorthernMax 10X Running buffer	Life Technologies	AM8671	
NuPAGE MOPS SDS Running buffer	Thermo Scientific	NP0001	

Organ Culture Dish 60x15mm	Life Technologies	08-772-12	
Paraformaldehyde	Polysciences, Inc.	577773	
PCR Thermal Cycler	Thermo Fisher Scientific	4484075	
Petri Dish 139 mm	Thermo Fisher Scientific	501V	
Petri dish 35 mm	Thermo Fisher Scientific	121V	
Petri Dish 60 mm	Falcon BD	351007	
Picoinjector	XenoWorks Digital Microinjector		any standard model
Pipette puller	Flaming-Brown Micropipette puller	Model P-1000	
pLVT plasmid	AddGene	32374	Empty vector suitable for oocyte expression.
Pregnant Mare Serum Gonadotropin	Lee BioSolutions	493-10	
QIAprep Spin Miniprep Kit	Qiagen	27104	purification of up to 20 uL of plasmid DNA
QIAquick PCR purification kit	Qiagen	28104	
Quikchange II site directed mutagenesis kit	Agilent	200523	mutagenesis kit for insertions and deletions
Quikchange lightning multi-site directed mutagenesis kit	Agilent	210512	mutagenesis kit for single site changes
Scissors (Fine point)	Fine science tools	14393	
Scissors (Medium point)	Fine science tools	WP114225	
Seal-Rite 1.5 mL microcentrifuge tube	USA Scientific	1615-5500	
Slide Warmer			any standard model
Spectrophotometer (Nanodrop)	Thermo Fisher Scientific	ND-ONE-W	
Stereomicroscope			any standard model
Subcloning Efficiency DH5a Competent Cells	Thermo Fisher Scientific	18265017	
Syringe	BD Biosciences	309623	1 ml, 27G(1/2)
T4 DNA Ligase	New England Biolabs	M0202L	
T7 mMessage Machine high-yield capped RNA transcription kit	Life Technologies	AM1340	
TritonX-100	Sigma-Aldrich	x-100	
Tween-20	Sigma-Aldrich	274348	
Tweezer (Fine point- Size 5)	Fine science tools	SN.743.12.1	
UltraPure Dnase/Rnase-Free Distilled Water	Thermo Fisher Scientific	10977015	
UltraPure Ethidium Bromide 10mg/mL	Thermo Fisher Scientific	15585011	
UVP UV/White lite transilluminator	Fisher Scientific	UV95041501	
Vectashield Mounting Medium	Vector Laboratories	H-1000	