

Materials List for

Generation of Centromere-Associated Protein-E *CENP-E*^{-/-} Knockout Cell Lines using the CRISPR/Cas9 System

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Materials

Name	Company	Catalog Number	Comments
0.25% Trypsin-EDTA	Gibco	25200056	
1.5 mL centrifuge tube	Axygen	MCT-150-C	
24-well plate	Corning	3524	
4S Gelred, 10,000x in water	Sangon Biotech (Shanghai)	A616697	
50 mL centrifuge tube	Corning	430828	
6 cm Petri dish	Corning	430166	
95% ethanol	Sinopharm Chemical Reagent	10009164	
96-well plate	Corning	3599	
Acetic acid	Sinopharm Chemical Reagent	10000218	Dissolve in H ₂ O to prepare a 10% working solution.
Agarose	Sangon Biotech (Shanghai)	A620014	
Alexa Fluor 488-labeled Goat Anti-Mouse IgG(H+L)	Beyotime	A0428	For immunofluorescence. Dissolve in 1% BSA/PBST. 1:500 dilution.
Alexa Fluor 488-labeled Goat Anti-Rabbit IgG(H+L)	Beyotime	A0423	For immunofluorescence. Dissolve in 1% BSA/PBST. 1:500 dilution.
Alexa Fluor 555-labeled Donkey Anti-Mouse IgG(H+L)	Beyotime	A0460	For immunofluorescence. Dissolve in 1% BSA/PBST. 1:500 dilution.
Anhydrous ethanol	Sinopharm Chemical Reagent	100092690	
Anti-BubR1 rabbit monoclonal antibody	Abcam	ab254326	For immunofluorescence. Dissolve in 1% BSA/PBST. 1:100 dilution
Anti-CENP-B mouse monoclonal antibody	Santa Cruz Biotechnology	sc-376392	For immunofluorescence. Dissolve in 1% BSA/PBST. 1:50 dilution.
Anti-CENP-E rabbit monoclonal antibody	Abcam	ab133583	For immunofluorescence. Dissolve in 1% BSA/PBST. 1:100 dilution.
Anti-fade mounting medium	Beyotime	P0131	Slowing down the quenching of fluorescent signals.
Anti- α -tubulin mouse monoclonal antibody	Abcam	ab7291	For immunofluorescence. Dissolve in 1% BSA/PBST. 1:100 dilution.

Biotek Epoch Microplate Spectrophotometer	Biotek Instruments	Biotek Epoch	
Bovine Serum Albumin (BSA)	Sinopharm Chemical Reagent	69003435	
Bpil (BbsI)	Thermo Fisher Scientific	ER1011	
CellTiter 96 aqueous one solution cell proliferation assay	Promega	G3580	
Centrifuge	Eppendorf	5424BK745380	
Colchicine	Sinopharm Chemical Reagent	61001563	
Confocal scanning microscope	Leica	Leica TCS SP8	
Coverslip	CITOTEST	80344-1220	
DAPI	Beyotime	C1006	
DH5 α competent cells	Sangon Biotech (Shanghai)	B528413	
DL2000 DNA marker	TaKaRa	3427A	
Dulbecco's Modified Eagle Medium (DMEM)	Gibco	C11995500BT	
Endo-free plasmid mini kit II	Omega	D6950	
Ezup Column Animal Genomic DNA Purification Kit	Sangon Biotech (Shanghai)	B518251	
Fetal bovine serum	Zhejiang Tianhang Biotechnology	11011-8611	
Gentian violet	Sinopharm Chemical Reagent	71019944	Dissolve in PBS to prepare 0.1% gentian violet/PBS.
Giemsa staining solution	Sinopharm Chemical Reagent	71020260	
GraphPad Prism version 8.0 software	GraphPad	www.graphpad.com	Statistical analysis.
GSK923295	MedChemExpress	HY-10299	
HeLa cell line	ATCC	CCL-2	
Humidified incubator	Heal Force	HF90/HF240	
Image J software	National Institutes of Health	https://imagej.nih.gov/ij/	Image processing and analysis.
Inverted microscope	Nanjing Jiangnan Novel Optics	XD-202	
LB agar powder	Sangon Biotech (Shanghai)	A507003	
Lipo6000 transfection reagent	Beyotime	C0526	
Nikon Ti-S2 microscope	Nikon	Ti-S2	
Opti-MEM reduced serum medium	Gibco	31985070	
Paraformaldehyde	Sinopharm Chemical Reagent	80096618	Dissolve in PBS to prepare 4% paraformaldehyde/PBS.
Penicillin-streptomycin solution	HyClone	SV30010	
SanPrep column DNA gel extraction kit	Sangon Biotech (Shanghai)	B518131	
SanPrep column plasmid mini-preps kit	Sangon Biotech (Shanghai)	B518191	
T4 DNA ligase	TaKaRa	2011A	
T4 polynucleotide kinase	TaKaRa	2021A	
TaKaRa Ex Taq	TaKaRa	RR001A	
Triton X-100	Sinopharm Chemical Reagent	30188928	Dissolve in PBS to prepare 0.25% Triton X-100/PBS.
Tween 20	Sinopharm Chemical Reagent	30189328	Dissolve in PBS to prepare 0.1% Tween 20/PBS.