

Functional Assessment of Kinesin-7 CENP-E in Spermatocytes using *In Vivo* Inhibition, Immunofluorescence and Flow Cytometry

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Materials

Name	Company	Catalog Number	Comments
0.25% Trypsin-EDTA	Gibco	25200056	
1 ml Syringe	Several commercial brands available		Sterile.
1.5 mL Centrifuge tube	Axygen	MCT-150-C	
50 mL Centrifuge Tube	Corning	430828	
6 cm Petri dish	Corning	430166	
95% Ethanol	Sinopharm Chemical Reagent Co.,Ltd	10009164	
tubulin rabbit polyclonal antibody	Beyotime	AF0001	For immunofluorescence assays. Use at 1:100.
rabbit anti-Histone H3 (phospho S10) monoclonal antibody	Abcam	ab267372	For immunofluorescence assays. Use at 1:100.
rabbit anti-TUBA4A polyclonal antibody	Sangon Biotech	D110022	For immunofluorescence assays. Use at 1:100.
Anti-SYCP3 rabbit monoclonal antibody	Abcam	ab175191	For immunofluorescence assays. Use at 1:100.
Adhesion microscope slides	CITOTEST	188105	
Alexa fluor 488-labeled goat anti-rabbit antibody	Beyotime	A0423	Secondary antibody. Use at 1:500.
Aluminium potassium sulphate	Sinopharm Chemical Reagent Co.,Ltd	10001060	
Anhydrous ethanol	Sinopharm Chemical Reagent Co.,Ltd	100092690	
Anti-fade mounting medium	Beyotime	P0131	Prevent photobleaching of fluorescent signals.
BD FACS Canto II	BD Biosciences	FACS Canto II	
Bovine Serum Albumin	Sinopharm Chemical Reagent Co.,Ltd	69003435	

Centrifuge	Eppendorf	5424BK745380	
Chloral hydrate	Sinopharm Chemical Reagent Co.,Ltd	80037516	
Citric acid	Shanghai Experiment Reagent Co., Ltd	122670	
Collagenase	Sangon Biotech	A004194-0100	
Coverslips	CITOTEST	10212020C	20 × 20 mm. Thickness 0.13-0.16 mm.
DAPI	Beyotime	C1006	
Dye vat	Several commercial brands available	91347802	
Eosin Y, alcohol soluble	Sinopharm Chemical Reagent Co.,Ltd	71014460	
Ether	Sinopharm Chemical Reagent Co.,Ltd	10009318	
Formaldehyde - aqueous solution	Sinopharm Chemical Reagent Co.,Ltd	10010018	
GSK923295	MedChemExpress	HY-10299	
Hematoxylin, anhydrous	Sinopharm Chemical Reagent Co.,Ltd	71020784	
ICR mouse	Shanghai SLAC Laboratory Animal Co., Ltd		
Image J software	National Institutes of Health	https://imagej.nih.gov/ij/	Fluorescent image analysis.
Leica ultramicrotome	Leica		
Leica EM UC-7 ultramicrotome	Leica	EM UC7	
Modfit MFLT32	Verity Software House		For analysis of flow cytometry results.
Nail polish	Several commercial brands available		
Neutral gum	Sinopharm Chemical Reagent Co.,Ltd	10004160	
Nikon Ti-S2 microscope	Nikon	Ti-S2	
Picric acid	Sinopharm Chemical Reagent Co.,Ltd	J60807	
Rheodyne	Sangon Biotech	F519160-0001	10 µl rheodyne
Sliced paraffin	Sinopharm Chemical Reagent Co.,Ltd	69019461	
Sodium iodate	Sinopharm Chemical Reagent Co.,Ltd	80117214	
Surgical instruments	Several commercial brands available		For abdominal surgery. Sterilize at 121 °C, 20 min.
Transmission electron microscope	FEI	Tecnai G2	
Trisodium citrate dihydrate	Shanghai Experiment Reagent Co., Ltd	173970	
Triton X-100	Sinopharm Chemical Reagent Co.,Ltd	30188928	Dilute in sterile PBS to make a 0.25% working solution.
Tween 20	Sinopharm Chemical Reagent Co.,Ltd	30189328	Dilute in sterile PBS to make a 0.1% working solution.
Paraformaldehyde	Sinopharm Chemical Reagent Co.,Ltd	80096618	
Xylene	Sinopharm Chemical Reagent Co.,Ltd	10023418	