

Materials List for:

In Vitro Reconstitution of Spatial Cell Contact Patterns with Isolated *Caenorhabditis elegans* Embryo Blastomeres and Adhesive Polystyrene Beads

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Materials

Name	Company	Catalog Number	Comments
1-(3-Dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride	Alfa Aesar	AAA1080703	For the bead preparation
Aspirator Tube Assembly	Drummond	21-180-13	For the blastomere isolation.
<i>Caenorhabditis elegans</i> strain: N2, wild-type	<i>Caenorhabditis</i> Genetics Center	N2	Strain used in this study
<i>Caenorhabditis elegans</i> strain: KSG5, genotype: zuls45; itIs37	in house	KSG5	Strain used in this study
Calibrated Mircopipets, 10 µL	Drummond	21-180-13	For the blastomere isolation
Carboxylate-modified polystyrene beads (30 µm diameter)	KISKER Biotech	PPS-30.0COOHP	For the bead preparation
CD Lipid Concentrate	Life Technologies	11905031	For the blastomere isolation. Work in the tissue culture hood.
Clorox	Clorox	N. A.	For the blastomere isolation. Open a new bottle when the hypochlorite treatment does not work well.
Coverslip holder	In house	N.A.	For the blastomere isolation.
Dissecting microscope: Zeiss Stemi 508 with M stand. Source of light is built-in LED. Magnification of eye piece is 10X.	Carl Zeiss	Stemi 508	For the blastomere isolation.
Fetal Bovine Serum, Qualified One Shot, Canada origin	Gibco	A3160701	For the blastomere isolation. Work in the tissue culture hood.
General Use and Precision Glide Hypodermic Needles, 25 gauge	BD	14-826AA	For the blastomere isolation
Inulin	Alfa Aesar	AAA1842509	For the blastomere isolation
MEM Vitamin Solution (100x)	Gibco	11120052	For the blastomere isolation.
MES (Fine White Crystals)	Fisher BioReagents	BP300-100	For the bead preparation
Multitest Slide 10 Well	MP Biomedicals	ICN6041805	For the blastomere isolation
PBS, Phosphate Buffered Saline, 10 x Powder	Fisher BioReagents	BP665-1	For the bead preparation
Penicillin-Streptomycin (10,000 U/mL)	Gibco	15140148	For the blastomere isolation.
Polyvinylpyrrolidone	Fisher BioReagents	BP431-100	For the blastomere isolation
Potassium Chloride	Bioshop	POC888	For the blastomere isolation
Rhodamine Red-X, Succinimidyl Ester, 5-isomer	Molecular Probes	R6160	For the bead preparation

Schneider's Drosophila Sterile Medium	Gibco	21720024	For the blastomere isolation. Work in the tissue culture hood.
Sodium Chloride	Bioshop	SOD001	For the blastomere isolation
Sodium Hydroxide Solution, 10 N	Fisher Chemical	SS255-1	For the blastomere isolation
Spinning disk confocal microscope: Yokogawa CSU-X1, Zeiss Axiovert inverted scope, Quant EM 512 camera, 63X NA 1.4 Plan apochromat objective lens. System was controlled by Slidebook 6.0.	Intelligent Imaging Innovation	N.A.	For live-imaging
Syringe Filters, PTFE, Non-Sterile	Basix	13100115	For the blastomere isolation.
Tygon S3 Laboratory Tubing,, Formulation E-3603, Inner diameter 3.175 mm	Saint Gobain Performance Plastics	89403-862	For the blastomere isolation.
Tygon S3 Laboratory Tubing,, Formulation E-3603, Inner diameter 6.35 mm	Saint Gobain Performance Plastics	89403-854	For the blastomere isolation.