

Materials List for:

# Analysis of the Gap Junction-dependent Transfer of miRNA with 3D-FRAP Microscopy

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URL: <https://www.jove.com/video/55870>

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## Materials

Name	Company	Catalog Number	Comments
neonatal NMRI mice	Charles River		
Gelatin	Sigma Aldrich	G7041	0.1% solution in PBS, sterilized
PBS	Pan Biotech	P04-53500	
Dulbecco's modified medium	Pan Biotech	P04-03550	
Penicillin/Streptomycin	Thermo Fisher Scientific	15140122	100 U/mL, 100µg/mL
Fetal bovine serum	Pan Biotech	P30-3306	
Cell culture plastic	TPP		
Primary Cardiomyocyte Isolation Kit	Thermo Fisher Scientific	88281	
HBSS	Thermo Fisher Scientific	88281	included in primary cardiomyocyte isolation kit
Trypan blue	Thermo Fisher Scientific	15250061	
miRIDIAN Dy547 labeled microRNA Mimic	Dharmacon	CP-004500-01-05	dissolve in RNase free water, stock solution 20µM
Sodium phosphate monobasic	Sigma	S3139	
Sodium phosphate dibasic	Carl Roth	T877.2	
Potassium chloride	Sigma	P9333	
Magnesium chloride	Serva	28305.01	
Sodium succinate	Carl Roth	3195.1	
0.05% Trypsin/EDTA solution	Merck	L2153	
4-well- Glass bottom chamber slides	IBIDI	80827	coat with 0.1% gelatin solution
Amaxa Nucleofector II	Lonza		program G-009 was used for Electroporation
LSM 780 ELYRA PS.1 system	Zeiss		
Excel software	Microsoft		
α-actinin antibody	Abcam	ab9465	dilution 1:200
Connexin43 antibody	Santa Cruz	sc-9059	dilution 1:200
goat anti-mouse Alexa 594 antibody	Thermo Fisher Scientific	A-11005	dilution 1:300
goat anti-rabbit Alexa 488 antibody	Thermo Fisher Scientific	A-11034	dilution 1:300
Connexin43 siRNA	Thermo Fisher Scientific	AM16708 ID158724	final concentration 250 nM
Near-IR Live/Dead Cell Stain Kit	Thermo Fisher Scientific	L10119	
CellTrace Calcein Red-Orange	Thermo Scientific	C34851	

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DAPI nuclear stain	Thermo Scientific	D1306	
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