

Materials List for:

# In Vitro Differentiation of Mature Myofibers for Live Imaging

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URL: <https://www.jove.com/video/55141>

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## Materials

Name	Company	Catalog Number	Comments
Dispase II	Gibco	17105041	
Collagenase type V	Sigma-Aldrich-Aldrich	C9263	
IMDM, Glutamax supplemented	Gibco	31980022	
Matrigel Growth reduced factor	Corning	354230	protein concentration of the lot should be around 10 mg/mL and endotoxin result should be <1.5
Chicken Embryo Extract	MP biomedical	2850145	it is also possible to prepare in the lab (Danoviz ME, Yablonka-Reuveni Z. Methods Mol Biol (2012))
Recombinant rat agrin	R&D systems	550-AG-100	
Penicillin/Streptomycin	Thermo Fisher Scientific	15140122	
Horse Serum	GE Healthcare	11581831	
Lipofectamine RNAiMAX	Invitrogen	13778-150	used to transfect siRNA
Lipofectamine LTX	Invitrogen	15338-100	used to transfect DNA
Lipofectamine 2000	Invitrogen	11668030	used to transfect siRNA plus DNA
DPBS	Gibco	14190094	
Fetal Bovine Serum (FBS)	Eurobio	CVFSVF0001	
Cell strainer	Corning	21008-949	
Fluorodishes	World precision instruments	FD35-100	dishes used to cultivate cells for live imaging
Triton X-100	Sigma-Aldrich	T9284	
16% PFA (Paraformaldehyde)	Science Services GmbH	E15710	
Goat Serum	Sigma-Aldrich	G9023	
BSA (Bovine Serum Albumine)	Sigma-Aldrich	A7906	
Saponine	Sigma-Aldrich	47036	
DAPI	Sigma-Aldrich	D9542	use at 200 ng/μL
Fluoromount-G	SouthernBiotech	0100-01	
Name	Company	Catalog Number	Comments
<b>Solutions and Media</b>			
Digestion Mix			in DPBS 5 mg/mL collagenase 3.5 mg/mL dispase sterile filtered, can be stored in working aliquotes for 2 weeks at -20 °C
Dissection Medium			in IMDM Glutamax supplemented 10% FBS 1% Penicillin/Streptomycin

			sterile filtered
Growth Medium			in IMDM Glutamax supplemented 20% FBS 1% Chicken Embryo Extract 1% Penicillin-Streptomycin sterile filtered
Differentiation Medium			in IMDM Glutamax supplemented 2% Horse Serum 1% Penicillin-Streptomycin sterile filtered
Blocking Solution			in DPBS 10% Goat Serum 5% BSA add 0.1% saponine when incubating with primary and secondary antibodies