

Materials List for:

Assessment of Calcium Sparks in Intact Skeletal Muscle Fibers

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Materials

Name	Company	Catalog Number	Comments
Dissecting microscope			Dissect out fibers and check muscle integrity
Dissection tools -scissors and fine tip forceps	Fine Science Tools		
Sylgard 184 Silicone Elastomer Kit	DOW CORNING	184 SIL ELAST KIT	Make ahead of time for fiber dissection. Mix 5 ml liquid Sylgard components and pour into a 60 mm glass Petri dish and waiting 48 hr to let the Sylgard compound become a clear, colorless solid substrate.
60 mm glass Petri dish	Pyrex	3160	Fiber dissection
Isotonic Tyrode Solution	Sigma-Aldrich		
Minimal Ca ²⁺ Tyrode Solution	Sigma-Aldrich		
Hypotonic Tyrode Solution	Sigma-Aldrich		
Collagenase type I	Sigma-Aldrich	C-5138	Fiber digestion
Fluo-4 AM	Invitrogen	F14201	Fluorescent Ca ²⁺ imaging dyes
TMRE	Invitrogen	T669	mitochondrial membrane potential fluorescent dyes
Delta TPG dishes	Biopetechs	0420041500C	35 mm glass bottom dish for imaging
Spark Fit software			data analysis software
Radiance 2100 laser scanning confocal microscope or equivalent microscope	Bio-Rad		
3 Axis Micromanipulator	Narishige International	MHW-3	
Temperature controllable orbital shaker	New Brunswick scientific		Fiber dissociation