

Materials List for:

# Visualization of MG53-mediated Cell Membrane Repair Using *in vivo* and *in vitro* Systems

Noah Weisleder<sup>1</sup>, Peihui Lin<sup>1</sup>, Xiaoli Zhao<sup>1</sup>, Matthew Orange<sup>1</sup>, Hua Zhu<sup>1</sup>, Jianjie Ma<sup>1</sup>

<sup>1</sup>Department of Physiology and Biophysics, Robert Wood Johnson Medical School

Correspondence to: Noah Weisleder at [noah.weisleder@umdnj.edu](mailto:noah.weisleder@umdnj.edu), Jianjie Ma at [maj2@umdnj.edu](mailto:maj2@umdnj.edu)

URL: <https://www.jove.com/video/2717>

DOI: [doi:10.3791/2717](https://doi.org/10.3791/2717)

## Materials

Name	Company	Catalog Number	Comments
Rodent treadmill	Columbus Instruments Exer 3/6 or equivalent		
70 % ethanol	ISC Bioexpress		
Dissection tools including fine tip forceps, spring scissors	World Precision Instruments, Inc.		
2 mg/ml collagenase type I	Sigma-Aldrich		
0 Ca <sup>2+</sup> Tyrode buffer (140 mM NaCl, 5 mM KCl, 10 mM HEPES, 2 mM MgCl <sub>2</sub> , pH 7.2, 290 mosm)	Sigma-Aldrich		
2.5mM Ca <sup>2+</sup> Tyrode buffer (140 mM NaCl, 2.5 mM CaCl <sub>2</sub> , 5 mM KCl, 10 mM HEPES, 2 mM MgCl <sub>2</sub> , pH 7.2, 290 mosm)	Sigma-Aldrich		
Temperature controllable orbital shaker	New Brunswick Scientific		
Delta TPG Dish	Fisher Scientific	1207133	
LSM 510 confocal microscope with an Enterprise 80 mW UV laser or equivalent confocal microscope	Carl Zeiss, Inc.		
FM1-43 or FM4-64 dyes	Invitrogen		
Borosilicate Capillaries Size 0.8-1.0 X 100 mm	PYREX	Part No. 9530-2	
Micropipette puller	Sutter Instrument Co.	model P-97	
3 axis micromanipulator	Narishige International	MHW-3	
Radiance 2100 laser scanning confocal microscope or equivalent microscope	Bio-Rad	MHW-3	
Saponin	Sigma-Aldrich	47036	