



emulate

Protocol for Emulate Organ-Chips:  
Immunofluorescence Staining of F-actin

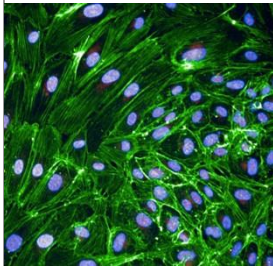
March 7, 2019

EP151 v1.0

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Goals:	Key Steps:	Other Required Materials:
Visualize F-actin via fluorescent imaging in Emulate Organ-Chips	<ul style="list-style-type: none"> <li>Immunofluorescence staining in chip</li> </ul>	<ul style="list-style-type: none"> <li>Alexa Fluor™ 488 Phalloidin (Invitrogen™ A12379)</li> <li>Dimethyl sulfoxide (DMSO)</li> <li>PBS</li> <li>4% paraformaldehyde (PFA)</li> <li>10% Saponin</li> <li>PBS</li> <li>BSA</li> <li>Fluorescence microscope</li> </ul>

## 1. Method

Sample type	Fixed Organ-Chip See Protocol EP137 Fixation and Immunofluorescence (IF) Staining.
Recommended fixative and incubation time	4% PFA, 15 minutes at room temperature
Recommended permeabilization and incubation time	1% saponin in PBS, 30 minutes at room temperature
Recommended blocking buffer and incubation time	1% BSA, 10% goat serum in PBS, overnight at 4°C
Recommended primary antibody dilution and incubation time	Alexa Fluor™ 488 Phalloidin (Invitrogen™ A12379) Dilute 1:1000 in PBS (stock prepared in DMSO), 30 minutes incubation at room temperature
Representative image	 <p>Image of F-actin (green) in liver sinusoidal endothelial cells in the Liver-Chip (bottom channel).</p>
More information on vendor site	<a href="https://www.thermofisher.com/order/catalog/product/A12379">https://www.thermofisher.com/order/catalog/product/A12379</a>

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