**For Research Use Only. Not For Use In Diagnostic Procedures**

USER GUIDE **MesGen Biotechnology**

**Version 3.0**

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| **FITC标记鬼笔环肽（绿色荧光）**  |

**Fluorescein phalloidin**

**Cat.No.**MF8203 **Size :** 200ul □ 300ul □

**Excitation ⁄ Emission (nm) :** 496 / 516nm

**Technical literature is available at:** [**www.mesgenbio.com**](http://www.mesgenbio.com)**.**

**E-mail MesGen Technical Services if you have questions on use of this system:** **tech@mesgenbio.com**

**Product overview**

Fluorescein phalloidin is the most widely used F-actin stain. The green fluorescent probe binds to F-actin with nanomolar affinity and it is highly photostable. Fluorescently labeled phallotoxins are very useful tool for investigating the distribution of F-actin. Labeled phallotoxins have similar affinity for both large and small filaments, binding in a stoichiometric ratio of about one phalloidin molecule per actin subunit in muscle and nonmuscle cells from various species of plants and animals. Fluorescent phallotoxins can also be used to quantify the amount of F-actin in cells.

**Key features**

• Selectively stains F-actin • Superior to antibody staining • Optimal for fixed and permeabilized samples

**Assay Protocol for Formaldehyde-Fixed Cells**

1. Wash cells twice with 37°C prewarmed phosphate-buffered saline, PBS, pH 7.4. (MesGen Cat.No.MG3150)
2. Fix the sample in 4% formaldehyde solution in PBS for 10 minutes at room temperature.

**Note: *Methanol can disrupt actin during the fixation process. Therefore, it is best to avoid any methanol containing fixatives. The preferred fixative is methanol-free formaldehyde.***

1. Wash two or more times with PBS.
2. Place each coverslip in 0.1% Triton X-100 in PBS for 3 to 5 minutes.

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**Do not eat**

**Store at -20° C & in the dark**

1. Wash two or more times with PBS.
2. To reduce nonspecific background staining with these conjugates, add 1% bovine serum albumin (BSA, MesGen MG8102) to the staining solution. It may also be useful to pre-incubate fixed cells with PBS containing 1% BSA for 20–30 minutes prior to adding the phallotoxin staining solution. When staining more than one coverslip, adjust volumes accordingly. For a stronger signal, use 2 or 3 ul per coverslip.
3. Place the staining solution on the coverslip for 20 minutes at room temperature (generally, any temperature between 4°C and 37°C is suitable). To avoid evaporation, keep the coverslips inside a covered container during the incubation.
4. Wash two or more times with PBS.
5. Mount coverslips and view.

**Store condition**

--20℃ & Protect from Moisture & Protect from Light

**Reference**

1. ***Regional Biomechanical Imaging of Liver Cancer Cells*** (October 30, 2018). Available at SSRN: [https://ssrn.com/abstract=3275463](https://ssrn.com/abstract%3D3275463)



 *Confocal images of (a) Bel7402, (b) HepG2, and (c) L02 cells*

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