

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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### **Product** Data Sheet

#### FM1-43

Molecular Weight: 611.54

Target: Fluorescent Dye

Pathway: Others

Storage: 4°C, sealed storage, away from moisture and light

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture

and light)

### **SOLVENT & SOLUBILITY**

#### In Vitro

DMSO: 50 mg/mL (81.76 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.6352 mL	8.1761 mL	16.3522 mL
	5 mM	0.3270 mL	1.6352 mL	3.2704 mL
	10 mM	0.1635 mL	0.8176 mL	1.6352 mL

Please refer to the solubility information to select the appropriate solvent.

### **BIOLOGICAL ACTIVITY**

Description

FM1-43 is a very lipophilic, water-soluble styrene dyes, can specifically bind to cell membranes and inner membrane organelles to produce fluorescence. FM1-43 is widely used in endocytic and exospic membrane structure markers.

In Vitro

- 1. Preparation of FM working solution
- 1.1 Preparation of the stock solution

Dissolve FM in DMSO to obtain 5 mM of FM.

Note: It is recommended to store the stock solution at -20°C or -80°C away from light and avoid repetitive freeze-thaw cycles.

 ${\bf 1.2\ Preparation\ of\ FM\ working\ solution}$ 

Dilute the stock solution in HBSS to obtain 5-20  $\mu\text{M}$  of FM working solution.

 $Note: Please\ adjust\ the\ concentration\ of\ FM\ working\ solution\ according\ to\ the\ actual\ situation.$ 

- 2. Cell staining
- 2.1 Suspension cells (6-well plate)
- a. Centrifuge at 1000 g at 4°C for 3-5 minutes and then discard the supernatant. Wash twice with PBS, 5 minutes each time. The cell density is  $1\times10^6/\text{mL}$
- b. Add 1 mL of working solution, and then incubate at room temperature for 5-30 minutes.
- c. Centrifuge at 400 g at 4°C for 3-4 minutes and then discard the supernatant.

- d. Wash twice with PBS, 5 minutes each time.
- e. Resuspend cells with serum-free cell culture medium or PBS. Observation by fluorescence microscopy or flow cytometry.
- 2.2 Adherent cells
- a. Culture adherent cells on sterile coverslips.
- b. Remove the coverslip from the medium and aspirate excess medium.
- c. Add 100  $\mu\text{L}$  of working solution, gently shake it to completely cover the cells, and then incubate at room temperature for
- 5-30 minutes.
- d. Wash twice with medium, 5 minutes each time. Observation by fluorescence microscopy or flow cytometry.

Storage

Protect from light.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### **CUSTOMER VALIDATION**

- Curr Biol. 2023 Nov 20:S0960-9822(23)01459-8.
- Microbiol Res. 2024 May 31:285:127774.

See more customer validations on www.MedChemExpress.com

#### **REFERENCES**

[1]. J E Gale, et al. FM1-43 dye behaves as a permeant blocker of the hair-cell mechanotransducer channel. J Neurosci. 2001 Sep 15;21(18):7013-25.

Caution: Product has not been fully validated for medical applications. For research use only.

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