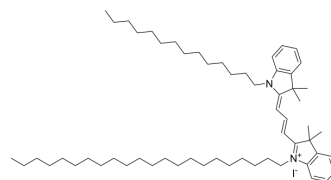


PKH 26

Cat. No.:	HY-D1451
CAS No.:	154214-55-8
Molecular Formula:	C ₅₉ H ₉₇ IN ₂
Molecular Weight:	961.32
Target:	Fluorescent Dye
Pathway:	Others
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 1.67 mg/mL (1.74 mM; ultrasonic and warming and heat to 60°C)

Solvent	Mass	Concentration		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.0402 mL	5.2012 mL	10.4024 mL
	5 mM	---	---	---
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

PKH 26 is a red fluorescent dye, PKH 26 can stably bind to the lipid region of cell membrane and emit red fluorescence (Ex/Em=551/567 nm), which is mainly used for in vitro cell labeling, in vitro cell proliferation studies and in vivo and in vitro cell tracing studies^[1].

In Vitro

General Protocol

1. Preparation of PKH 26 working solution

1.1 Preparation of the stock solution

Dissolve 1 mg PKH 26 in 1 mL DMSO to obtain 1 mM of stock solution.

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

1.2 Preparation of PKH 26 working solution

Dilute the stock solution in serum-free cell culture medium or PBS dilute at 1:50 or 1:100 to obtain 5-10 μM of working solution.

Note: Please adjust the concentration of PKH 26 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 1×10^6 /mL.
- b. Add 1 mL of working solution, and then incubate at room temperature for 10-45 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 μ 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

-80°C, 1 year

Protect from light

Precautions

1. Please adjust the concentration of PKH 26 working solution according to the actual situation.
 2. This product is for R&D use only, not for drug, household, or other uses.
 3. For your safety and health, please wear a lab coat and disposable gloves to operate.
- MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Pharmaceutics. 2023 Oct 13, 15(10), 2456.
- FASEB J. 2023 Mar;37(3):e22821.
- Oncol Lett. 2023 Nov 16.
- Organogenesis. 2023 Dec 31;19(1):2285836.
- Research Square Preprint. 2023 Apr 12.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Fischer K, et al. The flow cytometric PKH-26 assay for the determination of T-cell mediated cytotoxic activity. Methods. 2003;31(2):135-142.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA