HKYellow-AM (6/12-mixture)

Cat. No.: HY-130013

CAS No.: 1448821-89-3

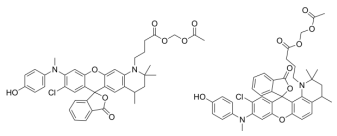
Molecular Formula: $C_{80}H_{78}Cl_2N_4O_{16}$

Molecular Weight: 1422.4

Target: Fluorescent Dye

Pathway: Others

Storage: -20°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 : 130 mg/mL (91.39 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	0.7030 mL	3.5152 mL	7.0304 mL
	5 mM	0.1406 mL	0.7030 mL	1.4061 mL
	10 mM	0.0703 mL	0.3515 mL	0.7030 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: 3.25 mg/mL (2.28 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 3.25 mg/mL (2.28 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

HKYellow-AM (6/12-mixture) is a yellow fluorescent probe that can detect ONOO- in living cells and tissues with high selectivity and sensitivity without cytotoxicity[2].

In Vitro

1. Preparation of HKYellow-AM (6/12-mixture) working solution
1.1 Preparation of the stock solution
Dissolve 1 mg HKYellow-AM (6/12-mixture) in 70 μL DMSO to obtain 10 mM of stock solution.
Note: It is recommended to store the stock solution at -20℃ -80℃ away from light and avoid repetitive freeze-thaw cycles.
1.2 Preparation of HKYellow-AM (6/12-mixture) working solution
Dilute the stock solution in serum-free cell culture medium or PBS to obtain 1-10 μM of working solution.
Note: Please adjust the concentration of HKYellow-AM (6/12-mixture) working solution according to the actual situation.
2. Cell staining

2.1 Suspension cells (6-well plate)
a. Centrifuge at 1000 g at 4□ 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 5-30 minutes.
c. Centrifuge at 400 g at 4□ 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 µL 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.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Trends Cell Biol. 2007 Sep;17(9):422-7. doi: 10.1016/j.tcb.2007.07.009. Epub 2007 Sep 4.

[2]. Yang D, et, al. Diarylamine-based fluorogenic probes for detection of peroxynitrite. EP2809666B1.

[3]. Yang D, et, al. Diarylamine-based fluorogenic probes for detection of peroxynitrite. EP2809666B1.

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