DASPEI

Cat. No.: HY-W247131 CAS No.: 3785-01-1 Molecular Formula: $C_{17}H_{21}IN_{2}$ 380.27 Molecular Weight:

Target: Fluorescent Dye

Pathway: Others

-20°C, sealed storage, away from moisture and light Storage:

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

and light)

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 41.67 mg/mL (109.58 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.6297 mL	13.1486 mL	26.2971 mL
	5 mM	0.5259 mL	2.6297 mL	5.2594 mL
	10 mM	0.2630 mL	1.3149 mL	2.6297 mL

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

BIOLOGICAL ACTIVITY

Description

DASPEI is a cationic styrenyl mitochondrial dye with large Stokes shift. DASPEI has excitation and emission wavelength at 550/573 nm, which has good light chromogenic property. DASPEI can stain mitochondria in living cells with good labeling property. And DASPEI can also be used to stain presynaptic nerve endings independently of neuronal activity^[1].

In Vitro

Preparation of DASPEI working solution

1) Preparation of the stock solution

Dissolve 1 mg of DASPEI in 0.2016 mL of DMSO to obtain 10 mM of DASPEI

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

2) Preparation of DASPEI working solution

Dilute the stock solution in serum-free cell culture medium or PBS to obtain 0.5-1 mM of DASPEI working solution.

Note: Please adjust the concentration of DASPEI working solution according to the actual situation.

Cell staining

1) For suspension cells: Centrifuge at 1000 g at 4 \(\text{M} \) for 3-5 minutes and then discard the supernatant. Wash twice with PBS, 5 minutes each time.

For adherent cells: Discard the cell culture medium, and add trypsin to dissociate cells to make a single-cell suspension. Centrifuge at 1000 g at 4\pi for 3-5 minutes and then discard the supernatant. Wash twice with PBS, 5 minutes each time.

- 2) Add 1 mL of DASPEI working solution, and then incubate at room temperature for 10-30 minutes.
- 3) Centrifuge at 400 g at 4\pi for 3-4 minutes and then discard the supernatant.
- 4) Wash twice with PBS, 5 minutes each time.
- 5) Resuspend cells with serum-free cell culture medium or PBS, and then detect by fluorescence microscope or flow cytometer.

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

REFERENCES

[1]. Leise EM. Selective retention of the fluorescent dye DASPEI in a larval gastropod mollusc after paraformaldehyde fixation. Microsc Res Tech. 1996 Apr 15;33(6):496-500.

[2]. E M Leise. Selective retention of the fluorescent dye DASPEI in a larval gastropod mollusc after paraformaldehyde fixation. Microsc Res Tech. 1996 Apr 15;33(6):496-500.

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

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