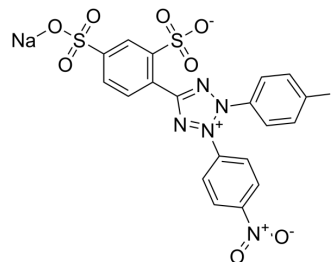


WST-1

Cat. No.:	HY-136976
CAS No.:	150849-52-8
Molecular Formula:	C ₁₉ H ₁₁ IN ₅ NaO ₈ S ₂
Molecular Weight:	651.34
Target:	Fluorescent Dye
Pathway:	Others
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 2 years; -20°C, 1 year (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro	H ₂ O : 125 mg/mL (191.91 mM; Need ultrasonic)				
	DMSO : 25 mg/mL (38.38 mM; ultrasonic and warming and heat to 80°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	1.5353 mL	7.6765 mL	15.3530 mL
	5 mM	0.3071 mL	1.5353 mL	3.0706 mL	
	10 mM	0.1535 mL	0.7676 mL	1.5353 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: ≥ 2.5 mg/mL (3.84 mM); Clear solution 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (3.84 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	WST-1 is a kind of water-soluble tetrazolium salt. WST induces the intracellular mitochondrial dehydrogenase to conduct NADH-dependent enzyme digestion reaction, releasing the water-soluble methyl benzene product. WST-1 can be used for the detection of cell proliferation and cytotoxicity, via the determination of the light absorption value at 450 nm ^[1] .
In Vitro	Preparation of WST-1 working solution 1.1 Preparation of the stock solution Dissolve 10 mg of WST-1 in 1 mL of DMSO to obtain 10 mg/mL of WST-1. 1.2 Preparation of WST-1 working solution Dilute the stock solution in serum-free cell culture medium or PBS to obtain 5-10 μM of WST-1 working solution. Note: Please adjust the concentration of WST-1 working solution according to the actual situation.

Cell staining

2.1 Cell preparation.

For suspension cells: Centrifuge at 1000 g at 4°C 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°C for 3-5 minutes and then discard the supernatant. Wash twice with PBS, 5 minutes each time.

2.2 Add 1 mL of WST-1 working solution and 1-methoxy PMS (2 mM), and then incubate at room temperature for 2 h.

2.3 Use microplate reader detect 450/690 nm OD.

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

CUSTOMER VALIDATION

- Biomaterials. 2022 Feb;281:121341.

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REFERENCES

[1]. Munetaka ISHIYAMA, et al. A new sulfonated tetrazolium salt that produces a highly water-soluble formazan dye. Chem. Pharm. Bull. 1993, 41(6): 1118-1122.

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

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