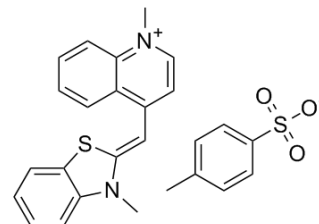


Thiazole Orange

Cat. No.:	HY-D0150
CAS No.:	107091-89-4
Molecular Formula:	C ₂₆ H ₂₄ N ₂ O ₃ S ₂
Molecular Weight:	476.61
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (52.45 mM; Need ultrasonic)
H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.0982 mL	10.4908 mL	20.9815 mL
	5 mM	0.4196 mL	2.0982 mL	4.1963 mL
	10 mM	0.2098 mL	1.0491 mL	2.0982 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (5.25 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (5.25 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Thiazole orange is an unsymmetrical cyanine dye which can be conjugated to oligonucleotides (ONs) to create fluorogenic hybridisation probes. Thiazole orange can be used for reticulocyte analysis^{[1][2]}.

CUSTOMER VALIDATION

- School of Chemistry and Molecular Bioscience, University of Wollongong. 2019 Oct.

See more customer validations on www.MedChemExpress.com

REFERENCES

- [1]. Linda G. Le, et al. Thiazole Orange: A New Dye for Reticulocyte Analysis. *cytometry* 7:508-517 (1986)
- [2]. Piotr Klimkowski, et al. Design of thiazole orange oligonucleotide probes for detection of DNA and RNA by fluorescence and duplex melting. *Org Biomol Chem.* 2019 Jun 28; 17(24): 5943–5950.
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Caution: Product has not been fully validated for medical applications. For research use only.