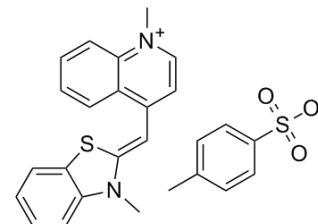


Thiazole Orange

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
	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 a fluorescent dye for reticulocyte analysis. Thiazole orange can be conjugated to oligonucleotides (ONs) to create fluorogenic hybridisation probes^{[1][2]}.

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.

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

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