



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

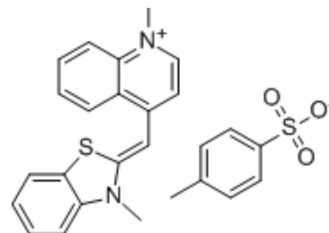
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## Thiazole Orange

<b>Cat. No.:</b>	HY-D0150
<b>CAS No.:</b>	107091-89-4
<b>Molecular Formula:</b>	C <sub>26</sub> H <sub>24</sub> N <sub>2</sub> O <sub>3</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	476.61
<b>Target:</b>	Fluorescent Dye
<b>Pathway:</b>	Others
<b>Storage:</b>	4°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 : 25 mg/mL (52.45 mM; Need ultrasonic)  
 MEOH : 25 mg/mL (52.45 mM; Need ultrasonic)  
 H<sub>2</sub>O : < 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: ≥ 1.25 mg/mL (2.62 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 1.25 mg/mL (2.62 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Thiazole Orange is an asymmetric anthocyanin dye that can be coupled with oligonucleotides (ONs) to prepare fluorescent hybridization probes. Thiazole Orange can be used for reticulocyte analysis. λ<sub>Ex</sub>/λ<sub>Em</sub> (including DNA) of Thiazole Orange =510/527 nm<sup>[1][2][3]</sup>.

### CUSTOMER VALIDATION

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

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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- [1]. O'Neil CS, et al. DNA Electrophoresis Using Thiazole Orange Instead of Ethidium Bromide or Alternative Dyes. J Vis Exp. 2019 Mar 31;(145)
- [2]. Linda G. Le, et al. Thiazole Orange: A New Dye for Reticulocyte Analysis. cytometry 7:508-517 (1986)
- [3]. 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.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA