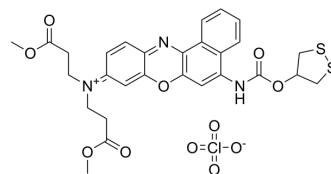


TRFS-red

Cat. No.:	HY-D1251
Molecular Formula:	C ₂₈ H ₂₈ ClN ₃ O ₁₁ S ₂
Molecular Weight:	682.12
Target:	Fluorescent Dye
Pathway:	Others
Storage:	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 : 5 mg/mL (7.33 mM); ultrasonic and warming and heat to 60°C																			
Preparing Stock Solutions	<table border="1"> <thead> <tr> <th rowspan="2">Solvent Concentration</th> <th colspan="3">Mass</th> </tr> <tr> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>1 mM</td> <td>1.4660 mL</td> <td>7.3301 mL</td> <td>14.6602 mL</td> </tr> <tr> <td>5 mM</td> <td>0.2932 mL</td> <td>1.4660 mL</td> <td>2.9320 mL</td> </tr> <tr> <td>10 mM</td> <td>---</td> <td>---</td> <td>---</td> </tr> </tbody> </table>	Solvent Concentration	Mass			1 mg	5 mg	10 mg	1 mM	1.4660 mL	7.3301 mL	14.6602 mL	5 mM	0.2932 mL	1.4660 mL	2.9320 mL	10 mM	---	---	---
	Solvent Concentration		Mass																	
		1 mg	5 mg	10 mg																
	1 mM	1.4660 mL	7.3301 mL	14.6602 mL																
5 mM	0.2932 mL	1.4660 mL	2.9320 mL																	
10 mM	---	---	---																	
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: ≥ 0.5 mg/mL (0.73 mM); Clear solution																			

BIOLOGICAL ACTIVITY

Description	TRFS-red, a red fluorescence emission off-on probe, is selective for thioredoxin reductase (TrxR). TRFS-red exhibits high response rate and sensitivity. TRFS-red can be used for imaging live cells ^[1] .
In Vitro	TRFS-red (1 μM; 30-120 min) gives red fluorescence signal in live HeLa cells, and the red fluorescence is predominantly distributed in the cytosol ^[1] . TRFS-red (10 μM) has a maximal absorption at ~530 nm in TE buffer (50 mM Tris-HCl and 1 mM EDTA, pH 7.4) ^[1] . TRFS-red displays a reliable fluorescence signal in the pH range of 5.5-8.5 ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Ma H, et, al. A fast response and red emission probe for mammalian thioredoxin reductase. Chem Commun (Camb). 2016 Oct 4;52(81):12060-12063.

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

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