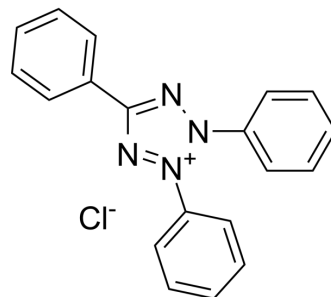


Tetrazolium Red

Cat. No.:	HY-D0714
CAS No.:	298-96-4
Molecular Formula:	C ₁₉ H ₁₅ ClN ₄
Molecular Weight:	334.8
Target:	Biochemical Assay Reagents
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

H₂O : 50 mg/mL (149.34 mM; Need ultrasonic)
DMSO : 16.67 mg/mL (49.79 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.9869 mL	14.9343 mL	29.8686 mL
	5 mM	0.5974 mL	2.9869 mL	5.9737 mL
	10 mM	0.2987 mL	1.4934 mL	2.9869 mL

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

In Vivo

- Add each solvent one by one: PBS
Solubility: 25 mg/mL (74.67 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 1.67 mg/mL (4.99 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 1.67 mg/mL (4.99 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 1.67 mg/mL (4.99 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Tetrazolium Red (2,3,5-Triphenyltetrazolium chloride; TTC) is used to observe the activity of dehydrogenase, and it turns colorless to red when exposed to hydrogen. Tetrazolium Red is a colorless, water-soluble dye that is reduced to a deep red, water-insoluble compound (formazan) mainly in the mitochondria of living cells, thereby distinguishing between surviving and infarcted brain tissue after stroke^[1].

CUSTOMER VALIDATION

- Molecules. 2023 Sep 8, 28(18), 6512.
- Research Square Print. 2022 May.

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REFERENCES

[1]. Sun YY, et al. Mannitol-facilitated perfusion staining with 2,3,5-triphenyltetrazolium chloride (TTC) for detection of experimental cerebral infarction and biochemical analysis. J Neurosci Methods. 2012 Jan 15;203(1):122-9.

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

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