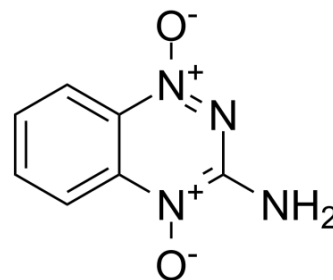


## Tirapazamine

Cat. No.:	HY-13767		
CAS No.:	27314-97-2		
Molecular Formula:	C <sub>7</sub> H <sub>6</sub> N <sub>4</sub> O <sub>2</sub>		
Molecular Weight:	178.15		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 39 mg/mL (218.92 mM)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	5.6132 mL	28.0662 mL	56.1325 mL
	5 mM	1.1226 mL	5.6132 mL	11.2265 mL
	10 mM	0.5613 mL	2.8066 mL	5.6132 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 (14.03 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% (20% SBE-β-CD in saline)**  
Solubility: ≥ 2.5 mg/mL (14.03 mM); Clear solution
- Add each solvent one by one: **10% DMSO >> 90% corn oil**  
Solubility: 2.5 mg/mL (14.03 mM); Suspended solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

Tirapazamine is an anticancer agent that shows selective cytotoxicity for **hypoxic** cells in solid tumors, thereby inducing single-and double-strand breaks in DNA, base damage, and cell death.

### CUSTOMER VALIDATION

- 
- J Mol Med (Berl). 2019 Aug;97(8):1183-1193.

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

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## REFERENCES

- [1]. Cai TY, et al. Tirapazamine sensitizes hepatocellular carcinoma cells to topoisomerase I inhibitors via cooperative modulation of hypoxia-inducible factor-1 $\alpha$ . Mol Cancer Ther. 2014 Mar;13(3):630-42.
- [2]. Sliwinska J, et al. Tirapazamine-doxorubicin interaction referring to heart oxidative stress and Ca<sup>2+</sup> balance protein levels. Oxid Med Cell Longev. 2012;2012:890826.
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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