

Product Information

Product ID T3468

CAS No. 27314-97-2

Chemical Name

Synonym SR 4233

Formula $\text{C}_7\text{H}_6\text{N}_4\text{O}_2$

Formula Wt. 178.15

Melting Point

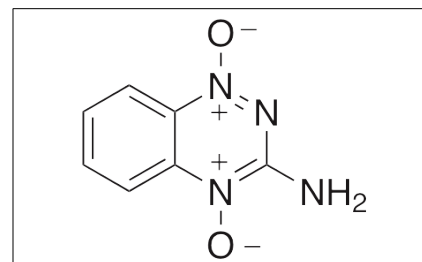
Purity $\geq 98\%$

Solubility

Store Temp Ambient

Ship Temp Ambient

Description	Tirapazamine is an anticancer chemotherapeutic compound currently in clinical trials co-administered with cisplatin or radiation as a potential treatment for several cancers. Tirapazamine inhibits DNA topoisomerase IIα and modulates replication protein A (RPA), inhibiting DNA replication. Tirapazamine also forms DNA damaging free radicals, inducing single- and double-stranded DNA breaks. Additionally, tirapazamine inhibits expression of HIF-1α, potentially through modulation of eukaryotic initiation factor eIF2α phosphorylation. This compound induces apoptosis in neuroblastoma cells, decreasing the mitochondrial membrane potential and levels of glutathione; this effect may be p53-dependent.
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Pricing and Availability

Bulk quantities available upon request

Product ID	Size	List Price
T3468	10 mg	\$91.00
T3468	25 mg	\$182.50
T3468	100 mg	\$510.50

References Zhang J, Cao J, Weng Q, et al. Suppression of hypoxia-inducible factor 1 α (HIF-1 α) by tirapazamine is dependent on eIF2 α phosphorylation rather than the mTORC1/4E-BP1 pathway. PLoS One. 2010 Nov 9;5(11):e13910. PMID: 21085474.

Yang B, Reynolds CP. Tirapazamine cytotoxicity for neuroblastoma is p53 dependent. Clin Cancer Res. 2005 Apr 1;11(7):2774-80. PMID: 15814660.

Peters KB, Wang H, Brown JM, et al. Inhibition of DNA replication by tirapazamine. *Cancer Res.* 2001 Jul 15;61(14):5425-31. PMID: 11454687.

Brown JM, Wang LH. Tirapazamine: laboratory data relevant to clinical activity. *Anticancer Drug Des.* 1998 Sep;13(6):529-39. PMID: 9755717.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.