

Tioxolone Datasheet

Technical Data

Molecular Weight (MW)	168.17
Formula	C ₇ H ₄ O ₃ S
CAS No.	4991-65-5
Synonyms	N/A

Solubility (25°C)		
Storage	2 years -20°C	Powder
	2 weeks 4°C	in DMSO
	6 months -80°C	in DMSO

Biological Activity

Tioxolone is a metalloenzyme carbonic anhydrase I inhibitor with a Ki of 91 nM. [1] Tioxolone lacks sulfonamide, sulfamate, or hydroxamate functional groups that are typically found in therapeutic carbonic anhydrase (CA) inhibitors, such as acetazolamide. Tioxolone is proposed to be a prodrug inhibitor that is cleaved via a CA II zinc-hydroxide mechanism known to catalyze the hydrolysis of esters. When tioxolone binds in the active site of CA II, it is cleaved and forms 4-mercaptobenzene-1,3-diol via the intermediate S-(2,4-thiophenyl) hydrogen thiocarbonate. The esterase cleavage product binds to the zinc active site via the thiol group and is therefore the active CA inhibitor, while the intermediate is located at the rim of the active-site cavity. [2][3]

References on Tioxolone

[1] Biochemistry. 2008;47(10):3174-84
[2] J Biomol Screen. 2006;11(7):782-91
[3] Bioorg Med Chem Lett. 2008;18(14):3938-41

PLEASE KEEP THE PRODUCT UNDER -20°C FOR LONG-TERM STORAGE.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE

Ospecific storage and handling information for each product is indicated on the product datasheet. Most Selleck products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality, but save your shipping charges by using the most economical storage conditions for an overnight shipment. Upon receipt of the product, follow the storage recommendations on the product datasheet.

Tioxolone Chemical Structure



Return Policy

Selleck Chemicals wishes you the best possible online shopping experience with our 365 day unconditional Return Policy. If you are not satisfied with your purchase, either for protocol related or product related problems, you may return any item(s) within 365 days from the original purchase date. Please see the following instructions when you return products.

- 1. All requests for returns should be communicated to Selleck Chemicals prior to shipping. Any items returned to Selleck Chemicals should be in the original packaging and in the same condition as originally purchased.
- 2. When returning purchased goods, please inform us of the purchase order number or package tracking number.
- 3. Return shipping is absolutely FREE.
- 4. This offer is only valid for products purchased directly from Selleck and its authorized distributors.
- 5. Once your return request is received and approved, your refund will be processed or automatically applied to your credit card within 7 days. Please note that depending on your credit card company, it may take additional 2-10 business days for us to post the refund to your account.

Toll Free:

(877) 796-6397

-- USA and Canada only --

Fax:

+1-713-796-9816

Orders:

+1-832-582-8158

sales@selleckchem.com

Tech Support:

+1-832-582-8158 Ext:3

Monday-Friday

9:00 AM-5:00 PM (Central Time)

tech@selleckchem.com

We will contact you within one business day

Website:

www.selleckchem.com