



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

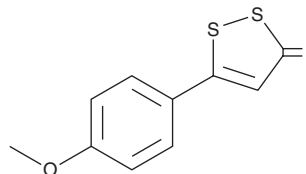
PRODUCT INFORMATION



Anethole Trithione

Item No. 35397

CAS Registry No.: 532-11-6
Formal Name: 5-(4-methoxyphenyl)-3H-1,2-dithiole-3-thione
Synonyms: ADT, Anethole Dithiolthione, Anetholdithiolthione, SKF 1717, Trithio-*p*-methoxyphenylpropene
MF: C₁₀H₈OS₃
FW: 240.4
Purity: ≥98%
UV/Vis.: λ_{max}: 236, 349, 433 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Anethole trithione is supplied as a solid. A stock solution may be made by dissolving the anethole trithione in the solvent of choice, which should be purged with an inert gas. Anethole trithione is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of anethole trithione in these solvents is approximately 10 and 12 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of anethole trithione can be prepared by directly dissolving the solid in aqueous buffers. The solubility of anethole trithione in PBS (pH 7.2) is approximately 0.30 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Anethole trithione is a dithiolthione with diverse biological activities.¹⁻⁴ It selectively binds to α-adrenergic receptors (α-ARs) over β-ARs and muscarinic acetylcholine receptors (mAChRs) in isolated rat parotid acini (IC₅₀s = 16.7, >100, and >100 μM, respectively).¹ Anethole trithione enhances saliva secretion induced by the mAChR agonist pilocarpine (Item No. 14487) or electrical stimulation of the parasympathetic nerve in rats.² It reduces tumor incidence and multiplicity in a rat model of azoxymethane-induced colon adenocarcinoma when administered in the diet at 100 and 200 ppm.³ Anethole trithione (500 mg/kg) prevents decreases in hepatic glutathione (GSH) levels and decreases mortality in mouse models of hepatotoxicity induced by acetaminophen (Item No. 10024) or carbon tetrachloride.⁴ Formulations containing anethole trithione have been used in the treatment of dry mouth.

References

1. Glenert, U. Acute effects of a possible sialogogue, anethole trithione, in rat parotid glands. *Eur. J. Pharmacol.* **209(4)**, 287-295 (1991).
2. Ukai, Y., Taniguchi, N., Takeshita, K., *et al.* Chronic anethole trithione treatment enhances the salivary secretion and increases the muscarinic acetylcholine receptors in the rat submaxillary gland. *Arch. Int. Pharmacodyn. Ther.* **271(2)**, 206-212 (1984).
3. Reddy, B.S., Rao, C.V., Rivenson, A., *et al.* Chemoprevention of colon carcinogenesis by organosulfur compounds. *Cancer Res.* **53(15)**, 3493-3498 (1993).
4. Ansher, S.S., Dolan, P., and Bueding, E. Chemoprotective effects of two dithiolthiones and of butylhydroxyanisole against carbon tetrachloride and acetaminophen toxicity. *Hepatology* **3(6)**, 932-935 (1983).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/12/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM