ADT-OH
Item No. 17102

CAS Registry No.: 18274-81-2
Formal Name: 5-(4-hydroxyphenyl)-3H-1,2-dithiole-3-thione
Synonym: ACS1
MF: C₉H₆O₃S₃
FW: 226.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid
UV/Vis: \( \lambda_{\text{max}}: 234, 354, 430 \text{ nm} \)

### Laboratory Procedures

For long term storage, we suggest that ADT-OH be stored as supplied at -20°C. It should be stable for at least two years. ADT-OH is supplied as a crystalline solid. A stock solution may be made by dissolving the ADT-OH in the solvent of choice. ADT-OH is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of ADT-OH in these solvents is approximately 1, 5, and 15 mg/ml, respectively.

ADT-OH is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ADT-OH should first be dissolved in DMF and then diluted with the aqueous buffer of choice. ADT-OH has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF/PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

ADT-OH is a derivative of anethole dithiolethione (ADT) and synthetic hydrogen sulfide (H₂S) donor. It can be readily esterified with other moieties. For example, it can be coupled with therapeutics like nonsteroidal anti-inflammatory drugs, and in animals for comparative studies with derived chimeras. ADT-OH has also been linked with a mitochondria-targeting motif to produce AP-39 (Item No. 17100), which selectively increases mitochondrial H₂S levels. ADT-OH is used both in cells and in animals for comparative studies with derived chimeras. 3,4

### References


### Related Products

For a list of related products please visit: www.caymanchem.com/catalog/17102

---

**WARNING:** This product is for laboratory research only; not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

**SAFETY DATA**

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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**

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, salability and merchantability, which extends beyond the description of the chemicals sold by Cayman. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery. Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence. This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees. Cayman’s exclusive remedy and Cayman’s sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman’s option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days after delivery constitutes a waiver by Buyer of all claims hereunder with respect to said material. For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.

Copyright Cayman Chemical Company, 04/24/2015