

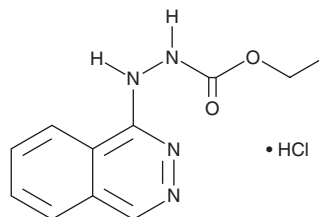
PRODUCT INFORMATION



Todalazine (hydrochloride)

Item No. 20893

CAS Registry No.: 3778-76-5
Formal Name: 2-(1-phthalazinyl)-hydrazinecarboxylic acid, ethyl ester, monohydrochloride
Synonyms: Apirachol, Binazine, Ecarazine
MF: C₁₁H₁₂N₄O₂ • HCl
FW: 268.7
Purity: ≥98%
UV/Vis.: λ_{max}: 210, 303, 315 nm
Supplied as: A crystalline 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

Todalazine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the todalazine (hydrochloride) in the solvent of choice. Todalazine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of todalazine (hydrochloride) in these solvents is approximately 1, 10, and 5 mg/ml, respectively.

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

Description

Todalazine (hydrochloride) is a β₂-adrenergic receptor antagonist with peripheral vasodilator activity.^{1,2} Administration of todalazine (5 μM) to pre-larval zebrafish led to hematopoietic cell expansion and protection from ionizing radiation.² It inhibited histone acetylation *in vitro* and, long-term (4 months), but not short-term (1 month), treatment in mice (3 mg/day) impaired hepatocyte histone acetylation and liver regeneration.³

References

1. Falase, A.O. and Salako, L.A. β-Adrenoceptor blockers in the treatment of hypertension. *Afr. J. Med. Med. Sci.* **8(1-2)**, 13/18 (1979).
2. Dimri, M., Joshi, J., Chakrabarti, R., et al. Todalazine protects zebrafish from lethal effects of ionizing radiation: Role of hematopoietic cell expansion. *Zebrafish* **12(1)**, 33-47 (2015).
3. Murata, K., Hamada, M., Sugimoto, K., et al. A novel mechanism for drug-induced liver failure: Inhibition of histone acetylation by hydralazine derivatives. *J. Hepatol.* **46(2)**, 322-329 (2007).

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, 12/19/2022

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