PRODUCT INFORMATION



1,4-DPCA ethyl ester

Item No. 38334

CAS Registry No.:	86443-19-8	
Formal Name:	1,4-dihydro-4-oxo-1,10-phenanthroline-3-	
	carboxylic acid, ethyl ester	0 0
Synonyms:	1,4-dihydrophenonthrolin-4-one-3-	
	Carboxylic acid ethyl ester, NSC 371161	
MF:	$C_{15}H_{12}N_2O_3$	
FW:	268.3	N
Purity:	≥98%	<u> </u>
UV/Vis.:	λ _{max} : 218, 239, 262, 284, 332, 349 nm	H N
Supplied as:	A crystalline solid	\checkmark
Storage:	-20°C	
Stability:	≥4 years	

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

Laboratory Procedures

1,4-DPCA ethyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the 1,4-DPCA ethyl ester in the solvent of choice, which should be purged with an inert gas. 1,4-DPCA ethyl ester is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 1,4-DPCA ethyl ester in ethanol is approximately 10 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Description

1,4-DPCA ethyl ester is a synthetic precursor of the prolyl 4-hydroxylase inhibitor 1,4-DPCA (Item No. 71220).^{1,2} 1,4-DPCA ethyl ester is also active against M. tuberculosis (MIC₉₀ = 23.99 μ M).²

References

- 1. Banerji, B., Conejo-Garcia, A., McNeill, L.A., et al. The inhibiton of factor inhibiting hypoxia-inducible factor (FIH) by β-oxocarboxylic acids. Chem. Commun. (Camb.) (43), 5438-5440 (2005).
- 2. Coulibaly, S., Cimino, M., Ouattara, M., et al. Phenanthrolinic analogs of quinolones show antibacterial activity against M. tuberculosis. Eur. J. Med. Chem. 207, 112821 (2020).

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.

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, 03/37/2024

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