

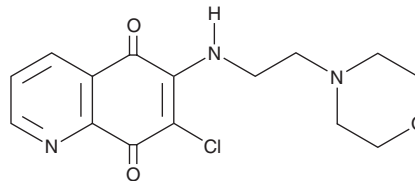
PRODUCT INFORMATION



DA-3003-2

Item No. 17282

CAS Registry No.: 383907-47-9
Formal Name: 7-chloro-6-[[2-(4-morpholinyl)ethyl]amino]-5,8-quinolinedione
Synonym: NSC 663285
MF: C₁₅H₁₆ClN₃O₃
FW: 321.8
Purity: ≥98%
UV/Vis.: λ_{max}: 233, 272, 477 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

DA-3003-2 is supplied as a crystalline solid. A stock solution may be made by dissolving the DA-3003-2 in the solvent of choice, which should be purged with an inert gas. DA-3003-2 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of DA-3003-2 in these solvents is approximately 20 and 30 mg/ml, respectively.

Description

Cdc25 dual-specific protein tyrosine phosphatases are important for cell cycle progression and often overexpressed in cancers. Through the removal of inhibitory phosphates, they function to catalyze the activation of cyclin-Cdk complexes. DA-3003-2 is a Cdc25 phosphatase inhibitor (IC₅₀ = 0.82 μM for human recombinant Cdc25B) that demonstrates antiproliferative activity.¹⁻³ At 20 μM, it has been shown to arrest asynchronous PC-3 prostate cancer cells in G₂/M phase.³

References

1. Lazo, J.S., Aslan, D.C., Southwick, E.C., *et al.* Discovery and biological evaluation of a new family of potent inhibitors of the dual specificity protein phosphatase Cdc25. *J. Med. Chem.* **44(24)**, 4042-4049 (2001).
2. Lavecchia, A., Cosconati, S., Limongelli, V., *et al.* Modeling of Cdc25B dual specificity protein phosphatase inhibitors: Docking of ligands and enzymatic inhibition mechanism. *ChemMedChem* **1(5)**, 540-550 (2006).
3. Nemoto, K. G₂/M accumulation in prostate cancer cell line PC-3 is induced by Cdc25 inhibitor 7-chloro-6-(2-morpholin-4-ylethylamino) quinoline-5, 8-dione (DA 3003-2). *Exp. Ther. Med.* **1(4)**, 647-650 (2010).

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.

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