

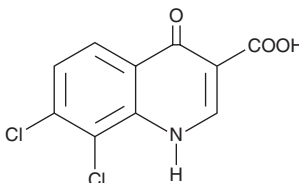
# PRODUCT INFORMATION



**CAY10577**

Item No. 10011256

**CAS Registry No.:** 300675-28-9  
**Formal Name:** 7,8-dichloro-1,4-dihydro-4-oxo-3-quinolinecarboxylic acid  
**MF:** C<sub>10</sub>H<sub>5</sub>Cl<sub>2</sub>NO<sub>3</sub>  
**FW:** 258.1  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 233, 255, 316, 329 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

CAY10577 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10577 in an organic solvent purged with an inert gas. CAY10577 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CAY10577 in these solvents is approximately 0.15 and 0.5 mg/ml, respectively.

If aqueous stock solutions are required for biological experiments, they can best be prepared by diluting the organic solvent into aqueous buffers or isotonic saline. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

## Description

Casein kinase 2 (CK2) is a serine/threonine-selective protein kinase involved in many signal transduction pathways. CK2 is known to negatively regulate apoptosis and its activity is increased in many proliferating tissues and tumors, which lends promise as an anti-cancer drug target. CAY10577 inhibits CK2 with an IC<sub>50</sub> value of 0.8 μM.<sup>1</sup>

## Reference

1. Golub, A.G., Yakovenko, O.Y., Bdzhola, V.G., *et al.* Evaluation of 3-carboxy-4(1H)-quinolones as inhibitors of human protein kinase CK2. *J. Med. Chem.* **49**, 6443-6450 (2006).

### 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.

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