

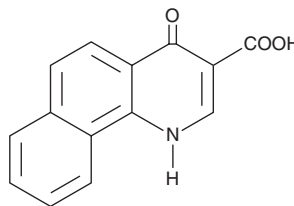
# PRODUCT INFORMATION



**NSC 210902**

Item No. 10011255

**CAS Registry No.:** 51726-83-1  
**Formal Name:** 1,4-dihydro-4-oxo-benzo[h]quinoline-3-carboxylic acid  
**MF:** C<sub>14</sub>H<sub>9</sub>NO<sub>3</sub>  
**FW:** 239.2  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 213, 256, 318, 349 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

NSC 210902 is supplied as a crystalline solid. A stock solution may be made by dissolving the NSC 210902 in the organic solvent of choice, purged with an inert gas. NSC 210902 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of NSC 210902 in these solvents is approximately 0.1 mg/ml.

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 anticancer drug target. NSC 210902 inhibits CK2 with an IC<sub>50</sub> value of 1 μM and competitively inhibits binding of ATP with a K<sub>i</sub> value of 0.28 μM.<sup>1</sup> NSC 210902 is selective for CK2 as it only minimally inhibits the activities of other protein kinases (e.g., JNK3, GSK3, Cdk5, and MSK1).<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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