

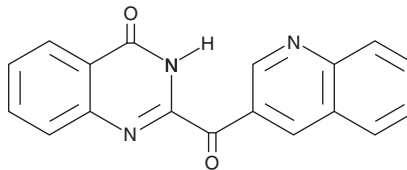
PRODUCT INFORMATION



Luotonin F

Item No. 14254

CAS Registry No.: 244616-85-1
Formal Name: 2-(3-quinolinylcarbonyl)-4(3H)-quinazolinone
MF: C₁₈H₁₁N₃O₂
FW: 301.3
Purity: ≥98%
UV/Vis.: λ_{max}: 213, 255, 304 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

Luotonin F is supplied as a crystalline solid. A stock solution may be made by dissolving the luotonin F in the solvent of choice, which should be purged with an inert gas. Luotonin F is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of luotonin F in these solvents is approximately 2.5 mg/ml.

Luotonin F is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, luotonin F should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Luotonin F has a solubility of approximately 0.1 mg/ml in a 1:6 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Luotonin F is an alkaloid found in the aerial parts of the *P. nigellastrum* Bunge, a plant used in traditional Chinese medicine for the treatment of rheumatism and various other inflammatory conditions.¹ It demonstrates cytotoxicity against leukemia P-388 cells (IC₅₀ = 2.3 μM) through a mechanism that involves stabilizing the DNA topoisomerase I-DNA complex.¹⁻³

References

1. Liang, J.L., Cha, H.C., and Jahng, Y. Recent advances in the studies on luotonins. *Molecules* **16**(6), 4861-4883 (2011).
2. Cagir, A., Jones, S.H., Gao, R., *et al.* Luotonin A. A naturally occurring human DNA topoisomerase I poison. *J. Am. Chem. Soc.* **125**(45), 13628-13629 (2003).
3. Mussardo, P., Corda, E., González-Ruiz, V., *et al.* Study of non-covalent interactions of luotonin A derivatives and the DNA minor groove as a first step in the study of their analytical potential as DNA probes. *Anal. Bioanal. Chem.* **400**(2), 321-327 (2011).

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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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