

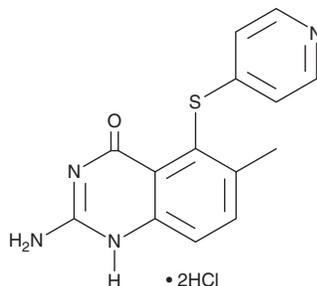
PRODUCT INFORMATION



Nolatrexed (hydrochloride)

Item No. 29247

CAS Registry No.: 152946-68-4
Formal Name: 2-amino-6-methyl-5-(4-pyridinylthio)-4(1H)-quinazolinone, dihydrochloride
Synonym: AG337
MF: C₁₄H₁₂N₄OS • 2HCl
FW: 357.3
Purity: ≥98%
UV/Vis.: λ_{max}: 232, 273 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

Nolatrexed (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the nolatrexed (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Nolatrexed (hydrochloride) is soluble in organic solvents such as DMSO. The solubility of nolatrexed (hydrochloride) in this solvent is approximately 15 mg/ml.

Nolatrexed (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, nolatrexed (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Nolatrexed (hydrochloride) has a solubility of approximately 0.11 mg/ml in a 1:8 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Nolatrexed is a thymidylate synthase inhibitor ($K_i = 11$ nM).¹ It inhibits cell growth in a panel of human and murine cancer cell lines ($IC_{50S} = 0.39$ - 6.6 μM). Nolatrexed inhibits the growth of L1210 cells, an effect that is decreased by greater than 50-fold by the addition of exogenous thymidine. Nolatrexed (0.7 and 3.5 μM) induces cell cycle arrest at the S phase in L1210 cells. It increases life span in a thymidine kinase-deficient L5178Y/TK⁻ murine lymphoma model when administered at doses ranging from 25 to 200 mg/kg.

Reference

1. Webber, S., Bartlett, C.A., Boritzki, T.J., et al. AG337, a novel lipophilic thymidylate synthase inhibitor: *In vitro* and *in vivo* preclinical studies. *Cancer Chemother. Pharmacol.* **37**(6), 509-517 (1996).

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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