PRODUCT INFORMATION



CP 31,398 (hydrochloride)

Item No. 27455

CAS Registry No.: 1217195-61-3

Formal Name: N³-[2-[2-(4-methoxyphenyl)

ethenyl]-4-quinazolinyl]-N¹,N¹dimethyl-1,3-propanediamine,

dihydrochloride

C₂₂H₂₆N₄O • 2HCl MF:

FW: 435.4 **Purity:** ≥98%

UV/Vis.: λ_{max} : 212, 245, 369 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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

• 2HCI

Laboratory Procedures

CP 31,398 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the CP 31,398 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. CP 31,398 (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of CP 31,398 (hydrochloride) in these solvents is approximately 2, 16, and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of CP 31,398 (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of CP 31,398 (hydrochloride) in PBS, pH 7.2, is approximately 2.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

CP 31,398 is a p53 stabilizing agent. 1 It increases active mutant p53 and p53 reporter gene expression without increasing total protein levels of p53 in H1299 lung cancer cells transfected with mutant p53. CP 31,398 is cytotoxic to a panel of 12 human glioma cell lines expressing wild-type or mutant p53 $(EC_{EO}s = 11.2-22.2 \mu M)$. In vivo, CP 31,398 (100 mg/kg) decreases tumor growth by 50% in an A375.S2 melanoma mouse xenograft model and completely inhibits tumor growth in a DLD-1 colon cancer mouse xenograft model. Dietary administration of CP 31,398 (50 and 100 ppm) suppresses lung adenocarcinoma formation in a mouse model of tobacco carcinogen-induced lung adenoma and adenocarcinoma formation.³

References

- 1. Foster, B.A., Coffey, H.A., Morin, M.J., et al. Pharmacological rescue of mutant p53 conformation and function. Science 286(5449), 2507-2510 (1999).
- Wischhusen, J., Naumann, U., Ohgaki, H., et al. CP-31398, a novel p53-stabilizing agent, induces p53-dependent and p53-independent glioma cell death. Oncogene 22(51), 8233-8245 (2003).
- 3. Rao, C.V., Patlolla, J.M., Qian, L., et al. Chemopreventive effects of the p53-modulating agents CP-31398 and Prima-1 in tobacco carcinogen-induced lung tumorigenesis in A/J mice. Neoplasia 15(9), 1018-1027 (2013).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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