

PRODUCT INFORMATION



CP 100,356 (hydrochloride)

Item No. 32853

CAS Registry No.: 142715-48-8
Formal Name: 4-(3,4-dihydro-6,7-dimethoxy-2(1H)-isoquinolinyl)-N-[2-(3,4-dimethoxyphenyl)ethyl]-6,7-dimethoxy-2-quinazolinamine, monohydrochloride

MF: C₃₁H₃₆N₄O₆ • HCl

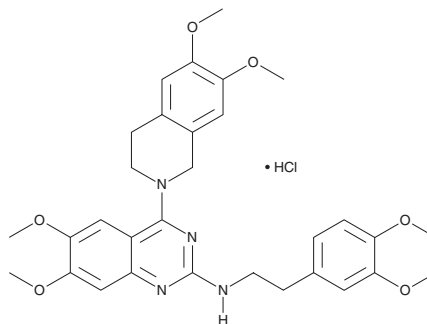
FW: 597.1

Purity: ≥98%

Supplied as: A 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

CP 100,356 (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the CP 100,356 (hydrochloride) in the solvent of choice, which should be purged with an inert gas. CP 100,356 (hydrochloride) is soluble in the organic solvent DMSO. The solubility of CP 100,356 (hydrochloride) in DMSO is approximately 40 mg/ml.

Description

CP 100,356 is an inhibitor of P-glycoprotein (P-gp, also known as multidrug resistance protein 1 (MDR1); IC₅₀ = 0.5 μM for inhibition of calcein AM transport in MDCKII monolayers).¹ It is selective for P-gp over multidrug resistance-associated protein 2 (MRP2) at 15 μM, as well as the cytochrome P450 (CYP) isoforms CYP1A2, CYP2C9, CYP2C19, CYP2D6, and CYP3A4 (IC₅₀s = >50 μM for all) and organic anion transporter 1B1 (OATP1B1; IC₅₀ = ~66 μM), but does inhibit breast cancer resistance protein (BCRP; IC₅₀ = 1.5 μM). CP 100,356 (24 mg/kg), when administered in combination with prazosin (Item No. 15023), increases the rate of prazosin clearance in rats.

Reference

1. Kalgutkar, A.S., Frederick, K.S., Chupka, J., *et al.* N-(3,4-dimethoxyphenethyl)-4-(6,7-dimethoxy-3,4-dihydroisoquinolin-2[1H]-yl)-6,7-dimethoxyquinazolin-2-amine (CP-100,356) as a "chemical knock-out equivalent" to assess the impact of efflux transporters on oral drug absorption in the rat. *J. Pharm. Sci.* **98**(12), 4914-4927 (2009).

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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