PRODUCT INFORMATION



HM30181

Item No. 32873

CAS Registry No.: 849675-66-7

Formal Name: N-[2-[2-[4-[2-(3,4-dihydro-6,7-

> dimethoxy-2(1H)-isoquinolinyl) ethyl]phenyl]-2H-tetrazol-5-yl]-4,5-dimethoxyphenyl]-4-oxo-4H-1-

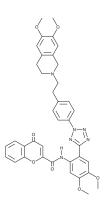
benzopyran-2-carboxamide

Synonym: Encequidar MF: $C_{38}H_{36}N_6O_7$ FW: 688.7 **Purity:** ≥98%

A crystalline solid Supplied as:

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

HM30181 is supplied as a crystalline solid. A stock solution may be made by dissolving the HM30181 in the solvent of choice, which should be purged with an inert gas. HM30181 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of HM30181 in these solvents is approximately 30 mg/ml.

Description

HM30181 is an inhibitor of P-glycoprotein (P-gp), also known as multidrug resistance protein 1 (MDR1; $IC_{50} = 0.63$ nM). ¹ It is selective for P-gp over breast cancer resistance protein (BCRP; $IC_{50} = 3,700$ nM), as well as multidrug resistance-associated protein 1 (MRP1), MRP2, and MRP3 at 100 μM. It inhibits transepithelial basal-to-apical transport of paclitaxel in MDCK monolayers overexpressing P-gp (IC_{50} = 35.4 nM). HM30181 inhibits tumor growth and induces tumor regression in an HT-29 mouse xenograft model when administered at doses of 10 and 20 mg/kg, respectively, in combination with paclitaxel (Item No. 10461).

Reference

1. Kwak, J.-O., Lee, S.H., Lee, G.S., et al. Selective inhibition of MDR1 (ABCB1) by HM30181 increases oral bioavailability and therapeutic efficacy of paclitaxel. Eur. J. Pharmacol. 627(1-3), 92-98 (2009).

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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