

PRODUCT INFORMATION



ONT-093

Item No. 28758

CAS Registry No.: 216227-54-2
Formal Name: 4-[2-[4-[(1E)-3-ethoxy-1-propen-1-yl]phenyl]-4-[(1-methylethyl)amino]phenyl]-1H-imidazol-5-yl]-N-(1-methylethyl)-benzenamine

Synonym: OC 144093

MF: C₃₂H₃₈N₄O

FW: 494.7

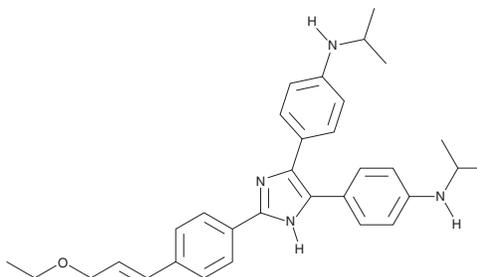
Purity: ≥98%

UV/Vis.: λ_{max}: 274, 359 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

ONT-093 is supplied as a crystalline solid. A stock solution may be made by dissolving the ONT-093 in the solvent of choice, which should be purged with an inert gas. ONT-093 is soluble in the organic solvent DMSO.

Description

ONT-093 is an orally bioavailable substituted diarylimidazole inhibitor of P-glycoprotein ATPase activity (IC₅₀ = 0.16 μM).¹ It reverses drug resistance to doxorubicin (Item No. 15007), vinblastine (Item No. 11762), and paclitaxel (Item No. 10461) in human lymphoma, breast, ovarian, uterine, and colorectal cancer cell lines *in vitro* (EC₅₀s = 9-38 nM). It is not cytotoxic to 15 normal, non-transformed, or tumor cell lines when used at concentrations up to 100 μM and exhibits weak cytostatic activity (average IC₅₀ = >60 μM). ONT-093 (30 mg/kg) reverses paclitaxel drug resistance in an HCT15 human colon carcinoma mouse xenograft model.

Reference

1. Newman, M.J., Rodarte, J.C., Benbatoul, K.D., *et al.* Discovery and characterization of OC144-093, a novel inhibitor of P-glycoprotein-mediated multidrug resistance. *Cancer Res.* **60(11)**, 2964-2972 (2000).

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.

WARRANTY AND LIMITATION OF REMEDY

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