

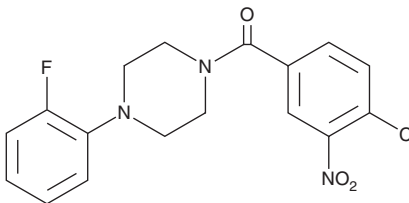
PRODUCT INFORMATION



SMI-481

Item No. 17637

CAS Registry No.: 432020-20-7
Formal Name: (4-chloro-3-nitrophenyl)[4-(2-fluorophenyl)-1-piperazinyl]-methanone
MF: C₁₇H₁₅ClFN₃O₃
FW: 363.8
Purity: ≥98%
UV/Vis.: λ_{max}: 240 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

SMI-481 is supplied as a crystalline solid. A stock solution may be made by dissolving the SMI-481 in the solvent of choice, which should be purged with an inert gas. SMI-481 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SMI-481 in these solvents is approximately 0.3, 30, and 50 mg/ml, respectively.

SMI-481 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SMI-481 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SMI-481 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Phosphatidylinositol (PtdIns) transfer proteins (PITPs) mediate the exchange of PtdIns and phosphatidylcholine between membranes, a step required for a wide array of cellular processes including cell division. SMI-481 is an inhibitor of the yeast PTP Sec14, blocking both Sec14-mediated transfer of [³H]-PtdIns *in vitro* and growth (IC₅₀s = 0.21 and 2.87 μM, respectively).¹ Suppression of Sec14 expression leads to proportional reduction in SMI-481 inhibition, suggesting that SMI-481 acts specifically through Sec14.¹ Moreover, SMI-481 does not affect [³H]-PtdIns transfer mediated by other yeast PITPs.¹

Reference

1. Nile, A.H., Tripathi, A., Yuan, P., *et al.* PITPs as targets for selectively interfering with phosphoinositide signaling in cells. *Nat. Chem. Biol.* **10**(1), 76-84 (2014).

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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