

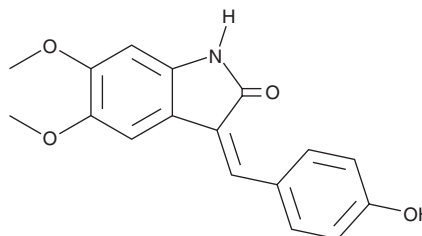
PRODUCT INFORMATION



RPI-1

Item No. 20384

CAS Registry No.: 269730-03-2
Formal Name: 1,3-dihydro-3-[(4-hydroxyphenyl)methylene]-5,6-dimethoxy-2H-indol-2-one
MF: C₁₇H₁₅NO₄
FW: 297.3
Purity: ≥98%
UV/Vis.: λ_{max}: 272, 346, 413 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

RPI-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the RPI-1 in the solvent of choice, which should be purged with an inert gas. RPI-1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of RPI-1 in these solvents is approximately 1, 10, and 15 mg/ml, respectively.

RPI-1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, RPI-1 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. RPI-1 has a solubility of approximately 0.14 mg/ml in a 1:6 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

RPI-1 is an ATP-dependent RET kinase inhibitor. It has been shown to selectively inhibit the anchorage-independent growth of NIH3T3 cells transformed by the *RET/PTC1* oncogene with an IC₅₀ value of 0.97 μM.¹ In a spontaneously metastasizing lung carcinoma xenograft mouse model, daily oral treatment with RPI-1 was reported to significantly reduce spontaneous lung metastases.²

References

1. Lanzi, C., Cassinelli, G., Pensa, T., *et al.* Inhibition of transforming activity of the *ret/ptc1* oncoprotein by a 2-indolinone derivative. *Int. J. Cancer* **85(3)**, 384-390 (2000).
2. Cassinelli, G., and Lanzi, C. Inhibition of c-Met and prevention of spontaneous metastatic spreading by the 2-indolinone RPI-1. *Mol. Cancer Ther.* **5(9)**, 2388-2397.

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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