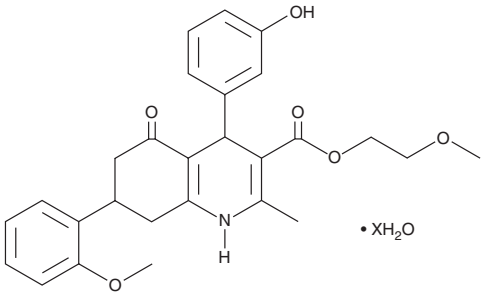
PRODUCT INFORMATION

HPI-1 (hydrate)

Item No. 15221

Formal Name:	1,4,5,6,7,8-hexahydro-4-(3-hydroxyphenyl)-7-(2-methoxyphenyl)-2-methyl-5-oxo-3-quinolinecarboxylic acid-2-methoxyethyl ester, hydrate
MF:	$C_{27}H_{29}NO_6 \bullet XH_2O$
FW:	463.5
Purity:	≥95%
UV/Vis.:	λ_{max}: 218, 365 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥2 years



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

Laboratory Procedures

HPI-1 (hydrate) is supplied as a crystalline solid. A stock solution may be made by dissolving the HPI-1 (hydrate) in the solvent of choice. HPI-1 (hydrate) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of HPI-1 (hydrate) in these solvents is approximately 20, 3, and 10 mg/ml, respectively.

HPI-1 (hydrate) is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

HPI-1 (hydrate) is a Hedgehog (Hh) pathway inhibitor that suppresses signaling through Sonic Hh (IC_{50} = 1.5 µM) without significantly affecting Wnt signaling (IC_{50} ≥ 30 µM).[1] HPI-1 suppresses Hh activation induced by loss of Suppressor of Fused or by Gli overexpression, suggesting action at posttranslational modification of Gli protein or at the interaction of Gli with a co-factor.[1] HPI-1 (hydrate) also inhibits signaling through the oncogenic Smoothened (Smo) mutant SmoM2 in neuron precursors, preventing cell proliferation.[1]

Reference

1. Hyman, J.M., Firestone, A.J., Heine, V.M., *et al.* Small-molecule inhibitors reveal multiple strategies for Hedgehog pathway blockade. *Proc. Natl. Acad. Sci. USA* **106(33)**, 14132-14137 (2009).

CAYMAN CHEMICAL
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
PHONE: [800] 364-9897
[734] 971-3335
FAX: [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM