

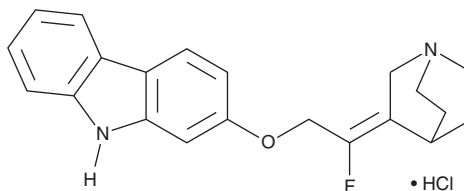
PRODUCT INFORMATION



YM-53601

Item No. 18113

CAS Registry No.: 182959-33-7
Formal Name: 2-[(2E)-2-(1-azabicyclo[2.2.2]oct-3-ylidene)-2-fluoroethoxy]-9H-carbazole, monohydrochloride
MF: C₂₁H₂₁FN₂O • HCl
FW: 372.9
Purity: ≥98%
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

YM-53601 is supplied as a crystalline solid. A stock solution may be made by dissolving the YM-53601 in an organic solvent purged with an inert gas. YM-53601 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of YM-53601 in ethanol is approximately 2 mg/ml and approximately 20 mg/ml in DMSO and DMF.

YM-53601 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, YM-53601 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. YM-53601 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

YM-53601 is a squalene synthase inhibitor (IC₅₀s = 79 and 90 nM in HepG2 cells and rat liver microsomes, respectively).¹ It inhibits cholesterol biosynthesis in rats (ED₅₀ = 32 mg/kg).¹ YM-53601 dose-dependently reduces plasma triglyceride and non-HDL cholesterol levels in hamsters fed both normal and high-fat diets. It also reduces viral RNA, core and NS3 protein production, and secreted viral particles in Huh7.5.1-8 cells infected with the hepatitis C virus (HCV) strain JFH-1 without affecting cell viability at concentrations ranging from 0.5 to 1.5 μM.² YM-53601 (1-10 μM) confers protection against cytotoxicity induced by the bacterial pore-forming toxin pneumolysin in HBE1 and normal human bronchial epithelial (NHBE) cells.³

References

1. Ugawa, T., Kakuta, H., Moritani, H., *et al.* YM-53601, a novel squalene synthase inhibitor, reduces plasma cholesterol and triglyceride levels in several animal species. *Brit. J Pharmacol.* **131**, 63-70 (2000).
2. Saito, K., Shirasago, Y., Suzuki, T., *et al.* Targeting cellular squalene synthase, an enzyme essential for cholesterol biosynthesis, is a potential antiviral strategy against hepatitis C virus. *J. Virol.* **89**(4), 2220-2232 (2015).
3. Statt, S., Ruan, J.W., Hung, L.Y., *et al.* Statin-conferred enhanced cellular resistance against bacterial pore-forming toxins in airway epithelial cells. *Am. J. Respir. Cell Mol. Biol.* **53**(5), 689-702 (2015).

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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/15/2024

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