

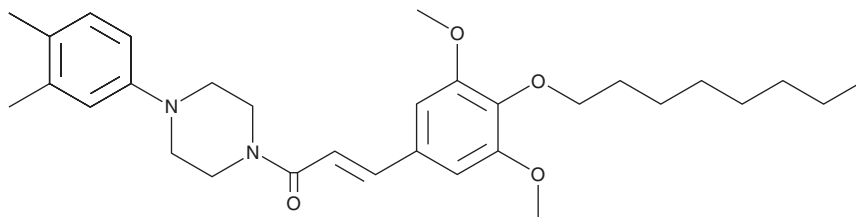
PRODUCT INFORMATION



YIC-C8-434

Item No. 45487

CAS Registry No.: 214265-97-1
Formal Name: (2E)-3-[3,5-dimethoxy-4-(octyloxy)phenyl]-1-[4-(3,4-dimethylphenyl)-1-piperazinyl]-2-propen-1-one
MF: C₃₁H₄₄N₂O₄
FW: 508.7
Purity: ≥95%
Supplied as: A 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

YIC-C8-434 is supplied as a solid. A stock solution may be made by dissolving the YIC-C8-434 in the solvent of choice, which should be purged with an inert gas. YIC-C8-434 is slightly soluble (0.1-1 mg/ml) in acetonitrile and DMSO.

Description

YIC-C8-434 is an inhibitor of acyl-CoA:cholesterol acyltransferase (ACAT; IC₅₀ = 11 nM in isolated rat hepatic microsomes).¹ It reduces plasma cholesterol levels by 79% in rats when administered at a dose of 0.005% in a high-cholesterol diet. Oral administration of YIC-C8-434 (8.3 mg/kg per day) reduces cholesterol absorption by the small intestine by 17% in rats.² YIC-C8-434 is primarily metabolized by the cytochrome P450 (CYP) isoform CYP3A2, which is expressed at lower levels in the female rat liver, and is selectively toxic to female rats, where it reduces food intake, weight gain, and organ weights.³

References

1. Ohishi, K., Aiyama, R., Hatano, H., *et al.* Structure-activity relationships of N-(3,5-dimethoxy-4-n-octyloxy)cinnamoyl)-N'-(3,4-dimethylphenyl)piperazine and analogues as inhibitors of acyl-CoA:cholesterol O-acyltransferase. *Chem. Pharm. Bull. (Tokyo)* **49(7)**, 830-839 (2001).
2. Ohishi, K., Sawada, H., Yoshida, Y., *et al.* Inhibitory effects of N-(3,5-dimethoxy-4-n-octyloxy)cinnamoyl)-N'-(3,4-dimethylphenyl)piperazine (YIC-C8-434), an acyl-CoA:cholesterol O-acyltransferase inhibitor, on cholesterol esterification in the intestine and liver. *Biol. Pharm. Bull.* **26(8)**, 1125-1128 (2003).
3. Kaneko, K., Uchida, K., Kobayashi, T., *et al.* Sex-dependent toxicity of a novel acyl-CoA:cholesterol acyltransferase inhibitor, YIC-C8-434, in relation to sex-specific forms of cytochrome P450 in rats. *Toxicol. Sci.* **64(2)**, 259-268 (2001).

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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