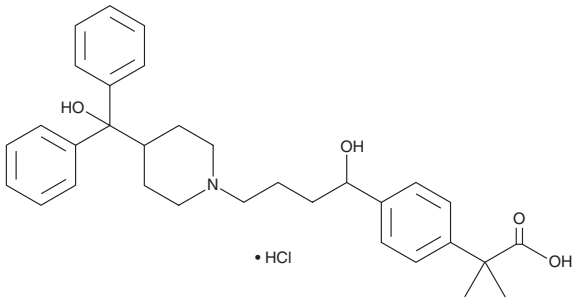
PRODUCT INFORMATION

Fexofenadine (hydrochloride)

Item No. 18191

CAS Registry No.: 153439-40-8
Formal Name: 4-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)-1-piperidinyl] butyl]-α,α-dimethyl-benzeneacetic acid, monohydrochloride
Synonym: MDL 16455A
MF: $C_{32}H_{39}NO_4$ • HCl
FW: 538.1
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

Fexofenadine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the fexofenadine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Fexofenadine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of fexofenadine (hydrochloride) in ethanol and DMSO is approximately 12 mg/ml and approximately 25 mg/ml in DMF.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of fexofenadine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of fexofenadine (hydrochloride) in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Fexofenadine is a histamine H_1 receptor antagonist (K_i = 10 nM).[1] It reverses contraction of isolated rat tracheal strips induced by acetyl-β-methylcholine (Item No. 23092).[2] Fexofenadine inhibits expression of IL-8 in TNF-α-stimulated HCT116 and COLO 205 cells.[3] Oral administration of fexofenadine (2 and 10 mg/kg) reduces severity of colitis and phospho-IκB kinase activation in a mouse model of colitis induced by dextran sulfate sodium (DSS; Item No. 23250).

Reference

1. Church, M.K. and Church, D.S. Pharmacology of antihistamines. *Indian J. Dermatol.* **58(3)**, 219-224 (2013).
2. Lai, W.S., Lin, Y.Y., Chu, Y.H., *et al.* Efficacy of fexofenadine in isolated rat tracheas. *Rhinology* **51(4)**, 376-380 (2013).
3. Koh, S.J., Kim, J.W., Kim, B.G., *et al.* Fexofenadine regulates nuclear factor-κB signaling and endoplasmic reticulum stress in intestinal epithelial cells and ameliorates acute and chronic colitis in mice. *J. Pharmacol. Exp. Ther.* **352(3)**, 455-461 (2015).

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