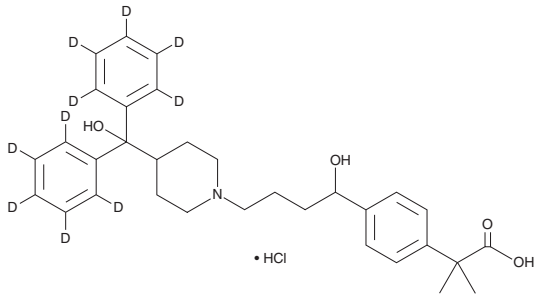
PRODUCT INFORMATION

Fexofenadine-d_{10} (hydrochloride)

Item No. 26115

CAS Registry No.: 1215821-44-5
Formal Name: 4-[1-hydroxy-4-[4-(hydroxydiphenylmethyl-d_{10})-1-piperidinyl]butyl]-α,α-dimethyl-benzeneacetic acid, monohydrochloride
MF: $C_{32}H_{29}D_{10}NO_4 \bullet HCl$
FW: 548.2
Chemical Purity: ≥98% (Fexofenadine)
Deuterium Incorporation: ≥99% deuterated forms (d_1-d_{10}); ≤1% d_0
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

Fexofenadine-d_{10} (hydrochloride) is intended for use as an internal standard for the quantification of fexofenadine (Item No. 18191) by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated *versus* unlabeled).

Fexofenadine-d_{10} (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the fexofenadine-d_{10} (hydrochloride) in the solvent of choice, which should be purged with an inert gas. Fexofenadine-d_{10} (hydrochloride) is slightly soluble in methanol.

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).

References

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