

# PRODUCT INFORMATION



## Fexofenadine-d<sub>10</sub> (hydrochloride)

Item No. 26115

**CAS Registry No.:** 1215821-44-5  
**Formal Name:** 4-[1-hydroxy-4-[4-(hydroxydiphenylmethyl-d<sub>10</sub>)-1-piperidinyl]butyl]-α,α-dimethylbenzeneacetic acid, monohydrochloride

**MF:** C<sub>32</sub>H<sub>29</sub>D<sub>10</sub>NO<sub>4</sub> • HCl

**FW:** 548.2

**Chemical Purity:** ≥98% (Fexofenadine)

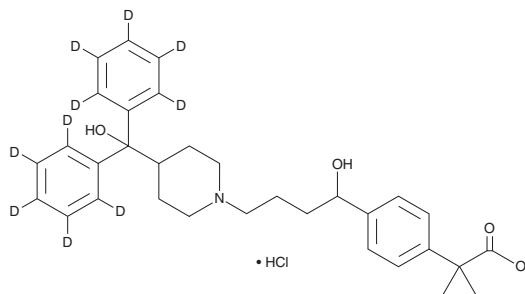
**Deuterium**

**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>10</sub>); ≤1% d<sub>0</sub>

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

### Description

Fexofenadine is a histamine H<sub>1</sub> receptor antagonist (K<sub>i</sub> = 10 nM).<sup>1</sup> It reverses contraction of isolated rat tracheal strips induced by acetyl-β-methylcholine (Item No. 23092).<sup>2</sup> Fexofenadine inhibits expression of IL-8 in TNF-α-stimulated HCT116 and COLO 205 cells.<sup>3</sup> 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).

#### 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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