



# **Certificate of Analysis**

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Product Name: Fexofenadine hydrochloride Catalog No.: 2429 Batch No.: 1

CAS Number: 153439-40-8

IUPAC Name:  $\alpha, \alpha$ -Dimethyl-4-[1-hydroxy-4-[4-(hydroxydiphenylmethyl)-1-piperidinyl]butyl]-benzeneacetic acid hydrochloride

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C<sub>32</sub>H<sub>39</sub>NO<sub>4</sub>.HCl

**Batch Molecular Weight:** 538.12 **Physical Appearance:** White solid

Solubility: DMSO to 50 mM
Storage: Desiccate at +4°C

**Batch Molecular Structure:** 

### 2. ANALYTICAL DATA

**HPLC:** Shows >99.9% purity

<sup>1</sup>H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 71.42 7.49 2.6 Found 71.43 7.5 2.43

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



## **Product Information**

Print Date: Mar 10th 2022

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#### **Description:**

Fexofenadine hydrochloride is a selective histamine  $H_1$  receptor antagonist (pK<sub>i</sub> = 8.1). Active metabolite of Terfenadine (Cat. No. 3948) that displays non-sedating antiallergic effects. Fexofenadine hydrochloride counteracts histamine mediated immune suppression and improves immunotherapy response.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>32</sub>H<sub>39</sub>NO<sub>4</sub>.HCl

Batch Molecular Weight: 538.12 Physical Appearance: White solid

Minimum Purity: ≥99%

#### **Batch Molecular Structure:**

Storage: Desiccate at +4°C

#### Solubility & Usage Info:

DMSO to 50 mM

#### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

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Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

#### References:

Li et al (2022) The allergy mediator histamine confers resistance to immunotherapy in cancer patients via activation of the macrophage histamine receptor H1. Cancer Cell 40 36. PMID: 34822775.

**Gillard and Chatelaine** (2006) Changes in pH differently affect the binding properties of histamine H<sub>1</sub> receptor antagonists. Eur.J.Pharmacol. *530* 205. PMID: 16388798.

**Sakairi** *et al* (2005) Effects of fexofenadine hydrochloride in a guinea pig model of antigen-induced rhinitis. Pharmacology **75** 76. PMID: 16037679.

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