

# **Certificate of Analysis**

Print Date: May 4th 2022

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Dexfenfluramine hydrochloride Catalog No.: 2695 Batch No.: 2 **Product Name:** 

CAS Number: EC Number: 221-806-0 3239-45-0

**IUPAC Name:** (S)-N-Ethyl- $\alpha$ -methyl-3-(trifluoromethyl)benzeneethanamine hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

C<sub>12</sub>H<sub>16</sub>F<sub>3</sub>N.HCl **Batch Molecular Formula:** 

**Batch Molecular Weight:** 267.72

**Physical Appearance:** Off White solid

water to 100 mM Solubility:

DMSO to 100 mM

Storage: Desiccate at RT

**Batch Molecular Structure:** 

.HCI

2. ANALYTICAL DATA

**HPLC**: Shows 95.0% purity

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

**Optical Rotation:**  $[\alpha]_D$  = +8.9 (Concentration = 2.83, Solvent = Water)

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 53.84 6.4 5.23 Found 53.85 6.26 5.13

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## **Product Information**

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CAS Number: 3239-45-0 EC Number: 221-806-0

IUPAC Name: (S)-N-Ethyl-α-methyl-3-(trifluoromethyl)benzeneethanamine hydrochloride

## **Description:**

Indirectly agonizes serotonin receptors via inhibition of 5-HT reuptake and stimulation of 5-HT release. Anorectic agent; decreases growth hormone, insulin, leptin, fat mass, lean mass and increases ghrelin in diet-switched diet-induced obese mice.

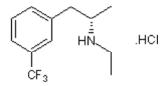
## **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>12</sub>H<sub>16</sub>F<sub>3</sub>N.HCl

Batch Molecular Weight: 267.72 Physical Appearance: Off White solid

Minimum Purity: ≥95%

## **Batch Molecular Structure:**



Storage: Desiccate at RT

## Solubility & Usage Info:

water to 100 mM DMSO to 100 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).

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:

**Bush** *et al* (2006) Chronic treatment with either dexfenfluramine or sibutr. in diet-switched diet-induced obese mice. Endocrine **29** 375. PMID: 16785615.

**Higgins** *et al* (2001) Influence of the 5-HT<sub>2C</sub> receptor antagonist SB242,084 on behaviour produced by the 5-HT<sub>2</sub> agonist Ro60-0175 and the indirect 5-HT agonist dexfenfluramine. Br.J.Pharmacol. *133* 459. PMID: 11399662.

Caccia et al (1997) Neuropharmacological effects of low and high doses of repeated oral dexfenfluramine in rats: a comparison with fluox. Pharmacol.Biochem.Behav. 57 851. PMID: 9259015.