

# **Certificate of Analysis**

Print Date: Apr 9th 2020

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**Product Name:** (+)-SK&F 10047 hydrochloride Catalog No.: 1079 Batch No.: 6

CAS Number: 133005-41-1

**IUPAC Name:** (2S,6S,11S)-1,2,3,4,5,6-Hexahydro-6,11-dimethyl-3-(2-propenyl)-2,6-methano-3-benzazocin-8-ol hydrochloride

#### 1. PHYSICAL AND CHEMICAL PROPERTIES

C<sub>17</sub>H<sub>23</sub>NO.HCI.<sup>1</sup>/<sub>4</sub>H<sub>2</sub>O **Batch Molecular Formula:** 

**Batch Molecular Weight:** 298.34 **Physical Appearance:** White solid

water to 100 mM Solubility:

DMSO to 100 mM

Storage: Desiccate at +4°C

**Batch Molecular Structure:** 

# 2. ANALYTICAL DATA

HPLC: Shows 99.6% purity

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

**Optical Rotation:**  $[\alpha]_D$  = +89.5 (Concentration = 1, Solvent = Ethanol)

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 68.44 8.28 4.69 Found 68.56 8.38 4.64

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# **Product Information**

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#### **Description:**

Prototypical  $\sigma_1$  receptor agonist. Behaviorally active in animal models of memory and stress.

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

Batch Molecular Formula: C<sub>17</sub>H<sub>23</sub>NO.HCl.<sup>1</sup>/<sub>4</sub>H<sub>2</sub>O

Batch Molecular Weight: 298.34 Physical Appearance: White solid

**Minimum Purity:** ≥98%

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

Storage: Desiccate at +4°C

#### 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).

Catalog No.: 1079

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:

**Kamei** *et al* (1996) (+)-SKF-10,047 and dextromethorphan ameliorate conditioned fear stress via DArgic systems linked to phenytoin-regulated  $\sigma_1$  sites. Eur.J.Pharmacol. *309* 149. PMID: 8874133.

**Matsuno** *et al* (1995) Involvement of  $\sigma_1$  receptor in (+)-N-allylnormetazocine-stimulated hippocampal cholinergic functions in rats. Brain Res. *690* 200. PMID: 8535837.

Walker et al (1990) Sigma receptors: biology and function. Pharmacol.Rev. 42 355. PMID: 1964225.

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