



# **Certificate of Analysis**

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**Product Name:** Proxyfan oxalate Catalog No.: 2477 Batch No.: 3

CAS Number: 1620017-81-3

**IUPAC Name:** 4-[3-(Phenylmethoxy)propyl]-1H-imidazole oxalate

## 1. PHYSICAL AND CHEMICAL PROPERTIES

 $C_{13}H_{16}N_2O.C_2H_2O_4$ **Batch Molecular Formula:** 

**Batch Molecular Weight:** 306.32 **Physical Appearance:** White solid

DMSO to 100 mM Solubility:

water to 100 mM

Storage: Desiccate at RT

**Batch Molecular Structure:** 

.C<sub>2</sub>H<sub>2</sub>O<sub>4</sub>

## 2. ANALYTICAL DATA

TLC: R<sub>f</sub> = 0.42 (Dichloromethane:Methanol:Ammonia soln. [9:1:3])

**HPLC:** Shows 99.3% purity

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

Microanalysis: Carbon Hydrogen Nitrogen

> Theoretical 58.82 5.92 9.15 Found 58.98 5.94 9.09

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## **Product Information**

Print Date: Feb 11th 2020

Batch No.: 3

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**Product Name: Proxyfan oxalate** 

CAS Number: 1620017-81-3

IUPAC Name: 4-[3-(Phenylmethoxy)propyl]-1*H*-imidazole oxalate

### **Description:**

High affinity histamine  $H_3$  receptor ligand (pK<sub>i</sub> = 8.62) that acts as a protean agonist at recombinant and native receptors. In functional studies, activity ranges from full agonist to inverse agonist depending on system used. Displays partial agonist effects on cAMP inhibition and MAPK activity, neutral antagonist activity on histamine release and partial inverse agonism of [ $^3$ H] -arachidonic acid release.

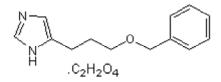
#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>13</sub>H<sub>16</sub>N<sub>2</sub>O.C<sub>2</sub>H<sub>2</sub>O<sub>4</sub>

Batch Molecular Weight: 306.32 Physical Appearance: White solid

**Minimum Purity:** ≥98%

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



Storage: Desiccate at RT

## Solubility & Usage Info:

DMSO to 100 mM water 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.: 2477

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:

**Baldi** *et al* (2005) The H<sub>3</sub> receptor protean agonist proxyfan enhances the expression of fear memory in the rat. Neuropharmacology *48* 246. PMID: 15695163.

**Krueger** *et al* (2005) G protein-dependent pharmacology of histamine H3 receptor ligands: evidence for heterogeneous active state receptor conformations. J.Pharmacol.Exp.Ther **314** 271. PMID: 15821027.

Gbahou et al (2003) Protean agonism at histamine H<sub>3</sub> receptors in vitro and in vivo. Proc.Natl.Acad.Sci.USA 100 11086.