

Certificate of Analysis

Product Name: 2-BFI hydrochloride

Catalog No.: 0348

Batch No.: 3

CAS Number: 89196-95-2

IUPAC Name: 2-(2-Benzofuranyl)-2-imidazoline hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₁H₁₀N₂O.HCl

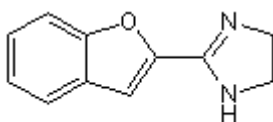
Batch Molecular Weight: 222.67

Physical Appearance: White solid

Solubility: water to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:



.HCl

2. ANALYTICAL DATA

TLC: R_f = 0.2 (Dichloromethane:Methanol [10:1])

Melting Point: Greater than 300°C

¹H NMR: Consistent with structure

	Carbon Hydrogen Nitrogen		
	Carbon	Hydrogen	Nitrogen
Theoretical	59.28	4.94	12.58
Found	59.11	4.88	12.57

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

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Description:

High affinity I₂ ligand (K_i = 9.8 nM). Putative I₂ agonist; potentiates morphine antinociception. Produces ipsiversive rotational behavior in rats with a full 6-OHDA lesion of the nigrostriatal tract.

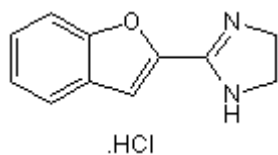
Physical and Chemical Properties:

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Physical Appearance: White solid

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

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).

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:

Aleman *et al* (1997) Labelling of I_{2B}-imidazoline receptors by [³H]2-(2-benzofuranyl)-2-imidazoline (2-BFI) in rat brain and liver: characterization, regulation and relation to monoamine oxidase enzymes. *Naunyn Schmiedebergs Arch.Pharmacol.* **356** 39. PMID: 9228188.

Sanchez-Blasquez *et al* (2000) Activation of I₂-imidazoline receptors enhances supraspinal morphine analgesia in mice: a model to detect agonist and antagonist activities at these receptors. *Br.J.Pharmacol.* **130** 146. PMID: 10781010.

MacInnes and Duty (2004) Locomotor effects of imidazoline I₂-site-specific ligands and monoamine oxidase inhibitors in rats with a unilateral 6-hydroxydopamine lesion of the nigrostriatal pathway. *Br.J.Pharmacol.* **143** 952. PMID: 15545290.

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