

Certificate of Analysis

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Product Name: KU14R

Catalog No.: 1131

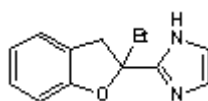
Batch No.: 1

CAS Number: 189224-48-4

IUPAC Name: 2-(2-Ethyl-2,3-dihydro-2-benzofuranyl)-1*H*-imidazole

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₁₄N₂O
Batch Molecular Weight: 214.27
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at RT
Batch Molecular Structure:



2. ANALYTICAL DATA

TLC: R_f = 0.52 (Dichloromethane:Methanol [10:1])
Melting Point: Between 137 - 139°C
HPLC: Shows 100% purity
¹H NMR: Consistent with structure
Microanalysis:

	Carbon	Hydrogen	Nitrogen		
Theoretical	72.87	6.58	13.07	0	0 0
Found	72.88	6.52	12.96	0	0 0

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

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Description:

Antagonist of the atypical imidazoline binding site (putative I₃ receptor) of pancreatic β-cells. Selectively blocks efaroxan-induced insulin secretion in vitro and in vivo.

Physical and Chemical Properties:

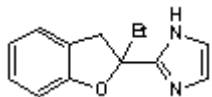
Batch Molecular Formula: C₁₃H₁₄N₂O

Batch Molecular Weight: 214.27

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Store at RT

Solubility & Usage Info:

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:

Chan et al (1997) The putative endogenous imidazoline receptor ligand, clonidine-displacing substance, is a potent insulin secretagogue in rat and human islets of Langerhans. *Br.J.Pharmacol.* **120** 926. PMID: 9138700.

Chan et al (1997) Clotrimazole and efaroxan stimulate insulin secretion by different mechanisms in rat pancreatic islets. *Naunyn Schmiedebergs Arch.Pharmacol.* **356** 763. PMID: 9453462.

Mayer and Taberner (2002) Effects of the imidazoline ligands efaroxan and KU14R on blood glucose in the mouse. *Eur.J.Pharmacol.* **454** 95. PMID: 12409010.

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