

# KU14R

**Catalog No: tcsc1007**



## Available Sizes

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**Size:** 10mg

**Size:** 50mg



## Specifications

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**CAS No:**

189224-48-4

**Formula:**

$C_{13}H_{14}N_2O$

**Pathway:**

Protein Tyrosine Kinase/RTK

**Target:**

Insulin Receptor

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

214.26

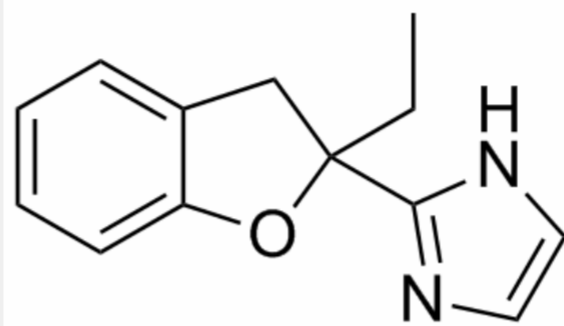
## Product Description

KU14R is a new I(3)-R antagonist, which selectively blocks the insulin secretory response to imidazolines.

IC50 Value:

Target: Insulin Receptor

A new I(3)-R antagonist, KU14R (2-(2-ethyl-2,3-dihydro-2-benzofuranyl)-2-imidazole), which selectively blocks the insulin secretory response to imidazolines. KU14R partially attenuated responses to Imidazole-4-acetic acid-ribotide (IAA-RP). The effects of KU14R on stimulus secretion-coupling in normal mouse islets and beta cells was compared by measuring KATP channel activity, plasma membrane potential, cytosolic calcium concentration ( $[Ca^{2+}]_c$ ) and dynamic insulin secretion. In the presence of 10 mmol/l but not of 5 mmol/l glucose, KU14R (30, 100 or 300 micromol/l) was ineffective. KATP channel was blocked by KU14R ( $IC_{50}$  31.9 micromol/l, Hill slope -1.5). KU14R does not act as an antagonist of either efaroxan or S22068 at an imidazoline site in vivo.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!