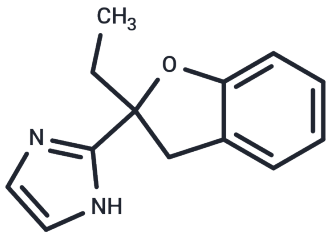
Data Sheet (Cat.No.T15672)

TargetMol
YOUR TARGET MOLECULES

KU14R

Chemical Properties



CAS No. : 189224-48-4

Formula: C13H14N2O

Molecular Weight: 214.26

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	KU14R is a new I(3)-R antagonist, which selectively blocks the insulin secretory response to imidazolines.
Targets(IC50)	Others
In vitro	KU14R partially attenuated responses to Imidazole-4-acetic acid-ribotide (IAA-RP). 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. By measuring KATP channel activity, plasma membrane potential, cytosolic calcium concentration ([Ca2+]c), and dynamic insulin secretion to compare the effects of KU14R on stimulus secretion-coupling in normal mouse islets and beta cells. KU14R (30, 100 or 300 micromol/l) was ineffective, in the presence of 10 mmol/l but not of 5 mmol/l glucose. KATP channel was blocked by KU14R (IC50 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.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.6672 mL	23.3361 mL	46.6723 mL
5 mM	0.9334 mL	4.6672 mL	9.3345 mL
10 mM	0.4667 mL	2.3336 mL	4.6672 mL
50 mM	0.0933 mL	0.4667 mL	0.9334 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Bozdagi O, Wang XB, Martinelli GP, et al. Imidazoleacetic acid-ribotide induces depression of synaptic responses in hippocampus through activation of imidazoline receptors. J Neurophysiol. 2011,105(3):1266-75.

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481