**KU14R**

**Cat. No.:** HY-15481  
**CAS No.:** 189224-48-4  
**Molecular Formula:** C₁₃H₁₄N₂O  
**Molecular Weight:** 214.26  
**Target:** Insulin Receptor  
**Pathway:** Protein Tyrosine Kinase/RTK  
**Storage:** Please store the product under the recommended conditions in the COA.

**BIOLOGICAL ACTIVITY**

**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 ([Ca²⁺]ᵢ) 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 (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.

**REFERENCES**

[5]. Susan L.F Chana, Anna L Palletta, John Clewsb. Evidence that the ability of imidazoline compounds to stimulate insulin secretion is not due to interaction with σ receptors. European Journal of Pharmacology. 1997,323( 2-3): 241-244.

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**Caution:** Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898  
Fax: 609-228-5909  
E-mail: tech@MedChemExpress.com  
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA