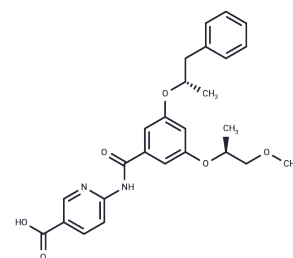


GKA50

Chemical Properties

CAS No. :	851884-87-2
Formula:	C ₂₆ H ₂₈ N ₂ O ₆
Molecular Weight:	464.51
Appearance:	no data available
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	GKA50 stimulates insulin release from mouse islets of Langerhans and MIN6 cells. GKA50 shows significant glucose lowering in high fat fed female rats. GKA50 is a potent glucokinase activator (EC ₅₀ =33 nM at 5 mM glucose).
Targets(IC ₅₀)	Others
In vitro	GKA50 activates human glucokinase enzymatic activity with an EC ₅₀ of 0.022 μM. GKA50 stimulates insulin secretion in the pancreatic insulinoma cell line, INS-1, with an EC ₅₀ of 0.065 μM. GKA50 reduces chronic-high-glucose-induced apoptosis via modulation of glucokinase and apoptotic protein BAD. GKA50 (0.01-100 μM; 24 hours) enhances INS-1 cell proliferation with EC ₅₀ values ranging from 1 to 2 μM. GKA50 (1.2 μM+40 μM glucose; 2-4 days) treatment reduces apoptosis induced by chronic high glucose in INS-1 cells.
In vivo	GKA50 gives significant glucose lowering in an oral glucose tolerance test.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1528 mL	10.764 mL	21.5281 mL
5 mM	0.4306 mL	2.1528 mL	4.3056 mL
10 mM	0.2153 mL	1.0764 mL	2.1528 mL
50 mM	0.0431 mL	0.2153 mL	0.4306 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

Coope GJ, et al. Predictive blood glucose lowering efficacy by Glucokinase activators in high fat fed female Zucker rats. Br J Pharmacol. 2006 Oct;149(3):328-35.

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