

DC260126

Chemical Properties	
CAS No.: Formula:	346692-04-4 C16H18FNO2S
Molecular Weight:	307.38
Appearance:	N/A
Storage:	0-4°C for short te

Biological Description			
Description	DC260126 is a small-molecule antagonist of FFA1 (GPR40)		
Targets(IC ₅₀)	GPR40: None		
In vivo	DC260126, a small molecule antagonist of GPR40, on β -cell function following administration of 10 mg/kg dose of DC260126 to obese diabetic db/db mice. Oral glucose tolerance test, glucose stimulated insulin secretion and insulin tolerance test were used to investigate the pharmacological effects of DC260126 on db/db mice after 21-days treatment. Immunohistochemistry and serum biochemical analysis were also performed. Although no significant change of blood glucose levels was found in DC260126-treated mice, DC260126 significantly inhibited glucose stimulated insulin secretion, reduced blood insulin level and improved insulin sensitivity after 3 weeks administration in db/db mice. Moreover, DC260126 reduced the proinsulin/insulin ratio and the apoptotic rate of pancreatic β -cells remarkably in DC260126-treated db/db mice compared to vehicle-treated mice (p<0.05, n = 8). Suggest that although DC260126 could not provide benefit for improving hyperglycemia, it could protect against pancreatic β -cells dysfunction through reducing overload of β -cells, and it increases insulin sensitivity possibly via alleviation of hyperinsulinemia in db/db mice[1].		

Solubility Information

So	lul	bil	ity

DMSO: 100 mg/mL (325.33 mM)

(< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.253 mL	16.267 mL	32.533 mL
5 mM	0.651 mL	3.253 mL	6.507 mL
10 mM	0.325 mL	1.627 mL	3.253 mL
50 mM	0.065 mL	0.325 mL	0.651 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - $80 \degree$ for 6 months; - $20 \degree$ for 1 month. Please use it as soon as possible.

Reference

1. Peng S , Ting W , Yuren Z , et al. DC260126: A Small-Molecule Antagonist of GPR40 that Protects against Pancreatic β -Cells Dysfunction in db/db Mice[J]. PLoS ONE, 2013, 8(6):e66744-.

2. Zhang X, Yan G, Li Y, et al. DC260126, a small-molecule antagonist of GPR40, improves insulin tolerance but not glucose tolerance in obese Zucker rats[J]. Biomedicine and Pharmacotherapy, 2010, 64(9):0-651.

Inhibitors · Natural Compounds · Compound Libraries

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