Repaglinide

Cat. No.: HY-15209

CAS No.: 135062-02-1

Molecular Formula: $C_{27}H_{36}N_2O_4$

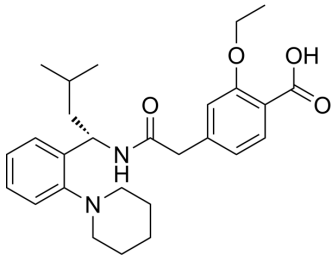
Molecular Weight: 452.59

Target: Potassium Channel

Pathway: Membrane Transporter/Ion Channel

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 50 mg/mL (110.48 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.2095 mL	11.0475 mL	22.0951 mL
	5 mM	0.4419 mL	2.2095 mL	4.4190 mL
	10 mM	0.2210 mL	1.1048 mL	2.2095 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (5.52 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (5.52 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.52 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Repaglinide is an insulin secretagogue for the treatment of type-2 diabetes mellitus[1].

In Vitro

Repaglinide reduces postprandial glucose levels by enhancing the early phase of insulin secretion and increasing the total amount of insulin secreted[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo	Repaglinide (AG-EE 623ZW) is very rapidly absorbed (t_{max} less than 1 hour) with a $t_{1/2}$ of less than one hour. Furthermore, Repaglinide is inactivated in the liver and more than 90 % excreted via the bile. Repaglinide (1 mg/kg p.o.) is effective (P<0.001) as an insulin-releasing agent in a rat model (low-dose streptozotocin) of type 2 diabetes. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wang LC, et al. Characteristics of repaglinide and its mechanism of action on insulin secretion in patients with newly diagnosed type-2 diabetes mellitus.Medicine (Baltimore). 2018 Sep;97(38):e12476.

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