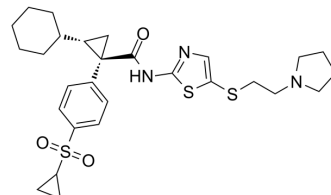


Globalagliatin

Cat. No.:	HY-13529
CAS No.:	1234703-40-2
Molecular Formula:	C ₂₈ H ₃₇ N ₃ O ₃ S ₃
Molecular Weight:	559.81
Target:	Glucokinase
Pathway:	Metabolic Enzyme/Protease
Storage:	<div>Powder</div> <div>-20°C 3 years</div> <div>4°C 2 years</div> <div>In solvent</div> <div>-80°C 2 years</div> <div>-20°C 1 year</div>



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (178.63 mM)

* "≥" means soluble, but saturation unknown.

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		1.7863 mL	8.9316 mL	17.8632 mL
	5 mM		0.3573 mL	1.7863 mL	3.5726 mL
	10 mM		0.1786 mL	0.8932 mL	1.7863 mL

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

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (4.47 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (4.47 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.47 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Globalagliatin (LY2608204) is a activator of glucokinase (GK) with EC₅₀ of 42 nM. IC₅₀ value: 42 nM (EC₅₀) Target: glucokinase in vitro: Globalagliatin activates glucokinase (GK) with EC₅₀ of 42 nM at 10 mM glucose with a concentration dependent manner at lower glucose concentrations. Globalagliatin also stimulates glucose metabolism in rat insulinoma INS1-E cells with EC₅₀ of 579 nM. in vivo: Globalagliatin decreases plasma glucose in a dose-dependent manner at both fasted and postprandial glucose levels. A maximal lowering of glucose AUC versus the untreated control group is observed with the high dose (30 mg/kg) and represents a 42% decrease. Interpolation of the data show that a 20% glucose AUC

decrease occurs at an average Globalagliatin concentration of 99 ng/mL (179 nM) in plasma, corresponding to a 6.9 mg/kg Globalagliatin dose. The in vivo blood brain barrier permeability of Globalagliatin results in a mean brain/plasma ratio of 0.17 five minutes post-dose with a mean total brain level of 0.539 nmol/g.

CUSTOMER VALIDATION

- Cell Rep. 2021 Jul 6;36(1):109327.

See more customer validations on www.MedChemExpress.com

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

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