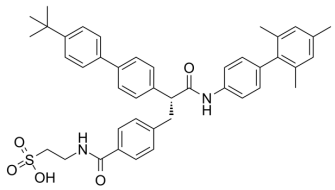
LGD-6972

Cat. No.:	HY-12525
CAS No.:	1207989-09-0
Molecular Formula:	$C_{43}H_{46}N_2O_5S$
Molecular Weight:	702.9
Target:	GCGR
Pathway:	GPCR/G Protein
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 : 125 mg/mL (177.83 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	1.4227 mL	7.1134 mL	14.2268 mL
5 mM	0.2845 mL	1.4227 mL	2.8454 mL
10 mM	0.1423 mL	0.7113 mL	1.4227 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: ≥ 2.08 mg/mL (2.96 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (2.96 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (2.96 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

LGD-6972 is a selective and orally active glucagon receptor antagonist. LGD-6972 has the potential for type 2 diabetes research[1].

In Vitro

In vitro, LGD-6972 binds competitively to glucagon receptor (GCGR) with high affinity and selectivity, suppressing both cAMP and glucose production[1].

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

In Vivo	In vivo, LGD-6972 reduces acute glucagon-stimulated hyperglycaemia as well as the hyperglycaemia observed in diabetic mouse models. The pharmacological activity of LGD-6972 appears to be mediated primarily by inhibiting glucagon receptor signaling[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Vajda EG, et al. Pharmacokinetics and pharmacodynamics of single and multiple doses of the glucagon receptor antagonist LGD-6972 in healthy subjects and subjects with type 2 diabetes mellitus. Diabetes Obes Metab. 2017 Jan;19(1):24-32.

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