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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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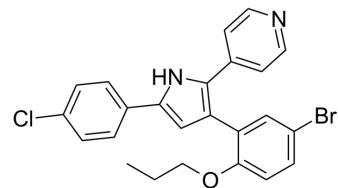
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## L-168049

Cat. No.:	HY-103547		
CAS No.:	191034-25-0		
Molecular Formula:	$C_{24}H_{20}BrClN_2O$		
Molecular Weight:	467.79		
Target:	GCGR		
Pathway:	GPCR/G Protein		
Storage:	Powder	-20°C	3 years
		4°C	2 years
In solvent	-80°C	6 months	
	-20°C	1 month	



## SOLVENT & SOLUBILITY

### In Vitro

DMSO :  $\geq 50$  mg/mL (106.89 mM)  
 \* " $\geq$ " means soluble, but saturation unknown.

Preparing Stock Solutions	Concentration	Mass		
		1 mM	1 mg	5 mg
	1 mM	2.1377 mL	10.6886 mL	21.3771 mL
	5 mM	0.4275 mL	2.1377 mL	4.2754 mL
	10 mM	0.2138 mL	1.0689 mL	2.1377 mL

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

## BIOLOGICAL ACTIVITY

Description	L-168049 is a potent, selective, orally active and non-competitive glucagon receptor antagonist with IC <sub>50</sub> s of 3.7 nM, 63 nM, and 60 nM for human, murine, and canine glucagon receptors, respectively <sup>[1][2]</sup> .
IC <sub>50</sub> & Target	IC50: 3.7 nM (human glucagon receptor), 63 nM (murine glucagon receptor), and 60 nM (canine glucagon receptor) <sup>[2]</sup>
In Vitro	<p>L-168049 (compound 49) inhibits glucagon (100 pM) stimulated cAMP synthesis in CHO cells expressing the human glucagon receptor (hGAR) (IC<sub>50</sub> of 41 nM). L-168049 blocks cAMP formation stimulated by glucagon in murine liver membranes<sup>[1]</sup>. L-168049 increases the apparent EC<sub>50</sub> for glucagon stimulation of adenylyl cyclase in Chinese hamster ovary cells expressing the human glucagon receptor and decreases the maximal glucagon stimulation observed, with a K<sub>b</sub> of 25 nM<sup>[2]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>
In Vivo	<p>In the liver of L-G6pc<sup>-/-</sup> mice, Pck1 mRNA expression is decreased by half 6 h after the administration of L-168049 (50 mg/kg body; p.o.), demonstrating the efficiency of the suppression of glucagon signaling. In agreement with the role of glucagon in the induction of extrahepatic gluconeogenesis, the administration of the L-168049 prevents the increase of the G6pc</p>

expression in both the kidneys and intestine of 6 h-fasted L-G6pc<sup>-/-</sup> mice<sup>[3]</sup>.

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

## REFERENCES

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- [1]. S E de Laszlo, et al. Potent, orally absorbed glucagon receptor antagonists. Bioorg Med Chem Lett. 1999 Mar 8;9(5):641-6.
  - [2]. M A Cascieri, et al. Characterization of a novel, non-peptidyl antagonist of the human glucagon receptor. J Biol Chem. 1999 Mar 26;274(13):8694-7.
  - [3]. Elodie Mutel, et al. Control of blood glucose in the absence of hepatic glucose production during prolonged fasting in mice: induction of renal and intestinal gluconeogenesis by glucagon. Diabetes. 2011 Dec;60(12):3121-31.
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**Caution: Product has not been fully validated for medical applications. For research use only.**

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