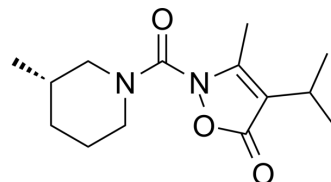


## BAY 59-9435

<b>Cat. No.:</b>	HY-102056		
<b>CAS No.:</b>	654059-21-9		
<b>Molecular Formula:</b>	C <sub>14</sub> H <sub>22</sub> N <sub>2</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	266.34		
<b>Target:</b>	Others		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (375.46 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	3.7546 mL	18.7730 mL	37.5460 mL
	5 mM	0.7509 mL	3.7546 mL	7.5092 mL
	10 mM	0.3755 mL	1.8773 mL	3.7546 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: 5 mg/mL (18.77 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 5 mg/mL (18.77 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: 5 mg/mL (18.77 mM); Clear solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

BAY 59-9435 is a potent and selective inhibitor of Hormone Sensitive Lipase (HSL), with an IC<sub>50</sub> of 0.023 μM.

#### IC<sub>50</sub> & Target

IC<sub>50</sub>: 0.023 μM (HSL)<sup>[1]</sup>.

#### In Vitro

BAY 59-9435 significantly diminishes the isoproterenol-increased media IL-6. BAY 59-9435 blocks isoproterenol-induced SphK1 expression<sup>[3]</sup>.

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

### Western Blot Analysis<sup>[3]</sup>

Cell Line:	3T3-L1 cells.
Concentration:	10 $\mu$ M.
Incubation Time:	1 h.
Result:	Pretreatment with BAY completely abrogated the induction of SphK1 expression by CL.

## CUSTOMER VALIDATION

- Cell Metab. 2022 Dec 6;34(12):1960-1976.e9.
- Research Square Preprint. 2023 Jul 13.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Ebdrup S, et al. Synthesis and structure-activity relationship for a novel class of potent and selective carbamoyl-triazole based inhibitors of hormone sensitive lipase. J Med Chem. 2004 Jan 15;47(2):400-10.
- [2]. Elizabeth A Rondini, et al. Novel Pharmacological Probes Reveal ABHD5 as a Locus of Lipolysis Control in White and Brown Adipocytes J Pharmacol Exp Ther. 2017 Dec;363(3):367-376.
- [3]. Wenliang Zhang, et al. Adipocyte lipolysis-stimulated interleukin-6 production requires sphingosine kinase 1 activity. J Biol Chem. 2014 Nov 14;289(46):32178-85.

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

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