



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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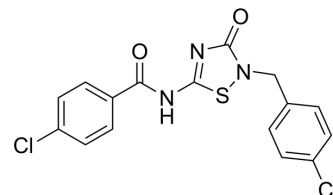
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O-304

Cat. No.:	HY-112233
CAS No.:	1261289-04-6
Molecular Formula:	C ₁₆ H ₁₁ Cl ₂ N ₃ O ₂ S
Molecular Weight:	380.25
Target:	AMPK
Pathway:	Epigenetics; PI3K/Akt/mTOR
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 : 30 mg/mL (78.90 mM; Need ultrasonic and warming)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
		1 mM		2.6298 mL	13.1492 mL	26.2985 mL
		5 mM		0.5260 mL	2.6298 mL	5.2597 mL
		10 mM		0.2630 mL	1.3149 mL	2.6298 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (6.57 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	O-304 is a first-in-class, orally available pan-AMPK activator, which increases AMPK activity by suppressing the dephosphorylation of pAMPK. O-304 exhibits a great potential as a agent to treat type 2 diabetes (T2D) and associated cardiovascular complications ^{[1][2]} .
IC ₅₀ & Target	AMPK ^[1]
In Vivo	O-304 increases glucose uptake in skeletal muscle, reduces β cell stress, and promotes β cell rest in diet-induced obese mice. O-304 reduces fasting plasma glucose levels and homeostasis model assessment of insulin resistance (HOMA-IR) in a proof-of-concept phase IIa clinical trial in type 2 diabetes (T2D) patients on Metformin ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Biochem J. 2022 Jun 7;BCJ20220170.
- Biochem J. 2021 Oct 20;BCJ20210411.
- University of Exeter. 2023 Aug 21.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Periodic Reporting for period 1-AMPK-DIAB (A small molecule AMP activated protein kinase (AMPK) activator, denoted O304, as a novel innovative drug for the treatment of type 2 diabetes).

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

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