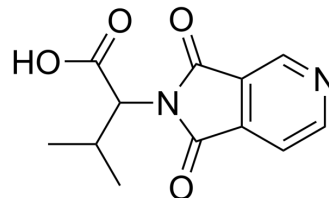


TXNIP-IN-1

Cat. No.:	HY-115688		
CAS No.:	1268955-50-5		
Molecular Formula:	C ₁₂ H ₁₂ N ₂ O ₄		
Molecular Weight:	248.23		
Target:	Others		
Pathway:	Others		
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 : 50 mg/mL (201.43 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	4.0285 mL	20.1426 mL	40.2852 mL
		5 mM	0.8057 mL	4.0285 mL	8.0570 mL
10 mM		0.4029 mL	2.0143 mL	4.0285 mL	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	<ol style="list-style-type: none"> Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (10.07 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (10.07 mM); Clear solution Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (10.07 mM); Clear solution 				

BIOLOGICAL ACTIVITY

Description	TXNIP-IN-1 is TXNIP-TRX (thioredoxin-interacting protein- thioredoxin) complex inhibitor extracted from patent US20200085800A1, Compound 1. TXNIP-IN-1 can be used in the research of TXNIP-TRX complex associated metabolic disorder (diabetes), cardiovascular disease, or inflammatory disease ^[1] .
IC₅₀ & Target	TXNIP-TRX complex ^[1]
In Vitro	TXNIP-IN-1 blocks high glucose (HG induced) TXNIP-TRX complex formation ^[1] .

TXNIP-IN-1 (1.25-5 μ M) reduces HG-induced expression of TNF in monocytes^[1].
TXNIP-IN-1 (1.25-5 μ M; 72 hours) inhibits TXNIP mRNA expression in THP1 cells^[1].
TXNIP-IN-1 (0.3-10 μ M; 72 hours) inhibits TXNIP mRNA expression in murine RAW macrophages^[1].
TXNIP-IN-1 (5-20 μ M; 72 hours) decreases TXNIP but not TNF-alpha mRNA levels in MIN6 cells^[1].
TXNIP-IN-1 (0.62-5 μ M; 72 hours) affects TXNIP and TNF-alpha mRNA expression in human pancreas 1.1B4 beta cells^[1].
TXNIP-IN-1 (5 μ M; 16-72 hours) inhibits c-TRX interaction in THP1 cells cultured in 25mM glucose^[1].
TXNIP-IN-1 targets TXNIP mRNA in human pancreatic islets^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Diseases. 2021 Dec 14;9(4):91.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Rama Natarajan, et al. Txnip-trx complex inhibitors and methods of using the same. US20200085800A1.

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

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