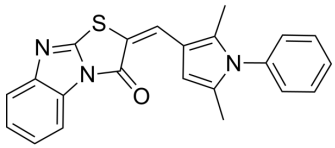
ITX3

Cat. No.:	HY-16663
CAS No.:	347323-96-0
Molecular Formula:	$C_{22}H_{17}N_3OS$
Molecular Weight:	371.45
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 : 2 mg/mL (5.38 mM; ultrasonic and warming and heat to 80°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6922 mL	13.4608 mL	26.9215 mL
	5 mM	0.5384 mL	2.6922 mL	5.3843 mL
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

ITX3 is a specific and nontoxic inhibitor of TrioN (N-terminal GEF domain of the multidomain Trio protein) with an IC_{50} value of 76 μM. ITX3 can be used for the research of agent[1][2].

IC_{50} & Target

IC50: 76 μM (TrioN)[1]

In Vitro

ITX3 (5, 10, 25, 50 and 100 μM; 24 h) inhibits TrioN signaling[1].
ITX3 (50 μM; 1 h) specifically inhibits TrioN[1].
ITX3 (100 μM; 36 h) inhibits nerve growth factor-induced neurite outgrowth in PC12 cells[1].
ITX3 (1, 10 and 100 μM) represses Rac1 activity and dose-dependently up-regulates the E-cadherin protein level and phospho-p38 signal in Tara-KD cells[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	TrioN-, GEF337-, Tiam1- and Vav2-expressing HEK293 cell lines[1]

Concentration:	50 μM
Incubation Time:	1 hour
Result:	Decreased TrioN-induced Rac activity.

CUSTOMER VALIDATION

- J Genet Genomics. 2019 Feb;46(2):87-96.
- FEBS Lett. 2022 Jun 18.

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REFERENCES

[1]. Bouquier N, et al. A cell active chemical GEF inhibitor selectively targets the Trio/RhoG/Rac1 signaling pathway. Chem Biol. 2009 Jun 26;16(6):657-66.

[2]. Yano T, et al. Tara up-regulates E-cadherin transcription by binding to the Trio RhoGEF and inhibiting Rac signaling. J Cell Biol. 2011 Apr 18;193(2):319-32.

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