

ITX3

Chemical Properties

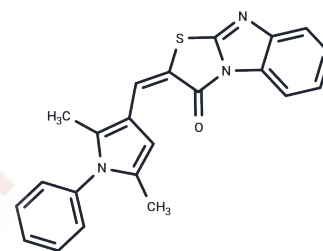
CAS No. : 347323-96-0

Formula: C₂₂H₁₇N₃O₃

Molecular Weight: 371.45

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	ITX3 is a specific, non-toxic, active and selective TrioN RhoGEF inhibitor with IC ₅₀ of 76 μM. ITX3 has anticancer effects, inhibits trion mediated GTP exchange on RhoG and Rac1, inhibits NGF-mediated neurite growth in PC12 cells and REF52 fibroblast structure formation induced by trion.
Targets(IC ₅₀)	Others,Rho,ROCK
In vitro	TrioN inhibitor In transfected mammalian cells, ITX3 blocked TrioN-mediated dorsal membrane ruffling and Rac1 activation while having no effect on GEF337-, Tiam1-, or Vav2-mediated RhoA or Rac1 activation. ITX3 specifically inhibited endogenous TrioN activity, as evidenced by its ability to inhibit neurite outgrowth in nerve growth factor (NGF)-stimulated PC12 cells or C2C12 differentiation into myotubes [1]. ITX3 repressed the Rac1 activity and dose-dependently up-regulated the E-cadherin protein level in the Tara-KD cells [2].

Solubility Information

Solubility	DMSO: 4 mg/mL (10.77 mM),Sonication and heating to 80°C are recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6922 mL	13.4608 mL	26.9215 mL
5 mM	0.5384 mL	2.6922 mL	5.3843 mL
10 mM	0.2692 mL	1.3461 mL	2.6922 mL
50 mM	0.0538 mL	0.2692 mL	0.5384 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Bouquier N, Vignal E, Charrasse S, et al. A cell active chemical GEF inhibitor selectively targets the Trio/RhoG/Rac1 signaling pathway. *Chem Biol.* 2009;16(6):657-666.

Yano T, Yamazaki Y, Adachi M, et al. Tara up-regulates E-cadherin transcription by binding to the Trio RhoGEF and inhibiting Rac signaling. *J Cell Biol.* 2011;193(2):319-33

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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