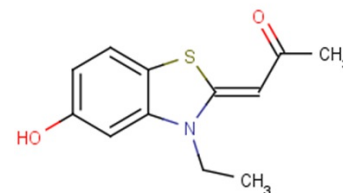


INDY

Chemical Properties

CAS No.:	1169755-45-6
Formula:	C ₁₂ H ₁₃ NO ₂ S
Molecular Weight:	235.3
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	INDY is a ATP-competitive inhibitor of Dyrk1A and Dyrk1B (IC ₅₀ s: 0.24 μ M and 0.23 μ M). INDY sharply causes the self-renewal capacity of normal and tumorigenic cells in primary Glioblastoma cell lines and neural progenitor cells. INDY binds in the ATP pocket of the enzyme (K _i : 0.18 μ M for Dyrk1A).
Targets(IC ₅₀)	Dyrk1B: 0.23 μ M Dyrk1A: (ki)0.18 μ M
In vitro	INDY potently reverses the aberrant tau-phosphorylation and rescues the repressed NFAT (nuclear factor of activated T cell) signalling induced by Dyrk1A (dual-specificity tyrosine-(Y)-phosphorylation-regulated kinase 1A) overexpression. INDY (0.3-30 μ M; 20 hours) mildly suppresses tau-phosphorylation at 3 μ M, however, nearly completely inhibits at 30 μ M [1].
In vivo	ProINDY (2.5 μ M) recovers ordinary growth of the Xenopus embryo [1].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.25 mL	21.249 mL	42.499 mL
5 mM	0.85 mL	4.25 mL	8.5 mL
10 mM	0.425 mL	2.125 mL	4.25 mL
50 mM	0.085 mL	0.425 mL	0.85 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Ogawa Y, et al. Development of a novel selective inhibitor of the Down syndrome-related kinase Dyrk1A. Nat Commun. 2010 Oct 5;1:86.
2. Pozo N, et al. Inhibition of DYRK1A destabilizes EGFR and reduces EGFR-dependent glioblastomagrowth. J Clin Invest. 2013 Jun;123(6):2475-87.

Inhibitors · Natural Compounds · Compound Libraries

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