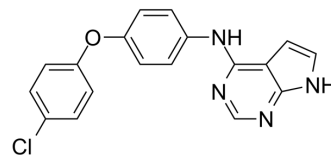


TTBK1-IN-2

Cat. No.:	HY-145313
CAS No.:	2765453-51-6
Molecular Formula:	C ₁₈ H ₁₃ ClN ₄ O
Molecular Weight:	336.78
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (148.46 mM; ultrasonic and adjust pH to 2 with HCl)					
	Preparing Stock Solutions	Solvent Concentration	Mass	1 mg	5 mg	10 mg
			1 mM	2.9693 mL	14.8465 mL	29.6930 mL
			5 mM	0.5939 mL	2.9693 mL	5.9386 mL
			10 mM	0.2969 mL	1.4846 mL	2.9693 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.42 mM); Clear solution					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.42 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	TTBK1-IN-2 (compound 29) is a potent Tau-Tubulin kinase (TTBK1) inhibitor with IC ₅₀ s of 0.24 and 4.22 μM, respectively. TTBK1-IN-2 reveals good brain penetration in vivo and is able to reduce TDP-43 phosphorylation not only in cell cultures but also in the spinal cord of transgenic TDP-43 mice ^[1] .
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REFERENCES

[1]. Nozal V, et al. TDP-43 Modulation by Tau-Tubulin Kinase 1 Inhibitors: A New Avenue for Future Amyotrophic Lateral Sclerosis Therapy. J Med Chem. 2022;65(2):1585-1607.

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

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