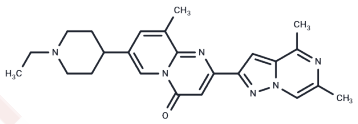
Data Sheet (Cat.No.T12935)

TargetMol

SMN-C3

Chemical Properties



CAS No. : 1449597-34-5

Formula: C24H28N6O

Molecular Weight: 416.52

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	SMN-C3 (MV8T2MCK57) is an orally active modulator of SMN2 splicing, and has the potential to treat spinal muscular atrophy (SMA).
Targets(IC50)	DNA/RNA Synthesis
In vivo	At P16, vehicle-treated D7 mice were significantly smaller and dying compared to heterozygous control littermates. In contrast, D7 mice treated with high doses of SMN-C3 exhibited phenotypes similar to the heterozygous controls. SMN-C3 treatment in D7 mice induces dose-dependent body weight gain, with some achieving ~80% of heterozygous control weight. SMN-C3 also normalizes D7 motor behavior, allowing rapid self-righting and comparable locomotor activity to heterozygous controls. Importantly, vehicle-treated mice die within 3 weeks post-birth (median survival of 18 days), whereas SMN-C3 extends survival dose-dependently, with a median of 28 days at low dose (0.3 mg/kg/day) and ~90% survival beyond P65 in the higher doses (1 and 3 mg/kg/day) [1].

Solubility Information

Solubility	DMSO: 2 mg/mL (4.8 mM),Sonication and heating to 60°C are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4008 mL	12.0042 mL	24.0085 mL
5 mM	0.4802 mL	2.4008 mL	4.8017 mL
10 mM	0.2401 mL	1.2004 mL	2.4008 mL
50 mM	0.048 mL	0.2401 mL	0.4802 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

Naryshkin NA, et al. Motor neuron disease. SMN2 splicing modifiers improve motor function and longevity in mice with spinal muscular atrophy. Science. 2014 Aug 8;345(6197):688-93.