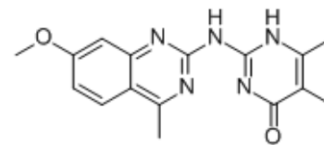


Madrasin

Cat. No.:	HY-100236		
CAS No.:	374913-63-0		
Molecular Formula:	C ₁₆ H ₁₇ N ₅ O ₂		
Molecular Weight:	311.34		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 2 mg/mL (6.42 mM; Need ultrasonic)
H₂O : < 0.1 mg/mL (insoluble)

Concentration	Solvent	1 mg	5 mg	10 mg
	Mass			
Preparing Stock Solutions	1 mM	3.2119 mL	16.0596 mL	32.1192 mL
	5 mM	0.6424 mL	3.2119 mL	6.4238 mL
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

Madrasin (DDD00107587) is a splicing inhibitor that prevents formation of both splicing intermediates and products in vitro and interferes with one or more early steps in the pathway of spliceosome assembly. Madrasin also can inhibit pre-mRNA splicing in vitro and modify splicing of endogenous pre-mRNA in cells^[1].

IC₅₀ & Target

pre-mRNA splicing^[1]

In Vitro

Madrasin (10-30 μM; 4-24 hours; HeLa cells) treatment inhibits the splicing of each of the RIOK3, BRD2, and Hsp40, MCL1, CCNA2, AURKA and p27 pre-mRNAs in both HeLa and HEK293 cells^[1].
Madrasin (10-30 μM; 4-24 hours; HeLa and HEK293 cells) treatment shows a dose- and time-dependent inhibitory effect on cell cycle progression^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.
RT-PCR^[1]

Cell Line:	HeLa cells
Concentration:	10 μ M, 20 μ M, or 30 μ M
Incubation Time:	4 hours, 8 hours, or 24 hours
Result:	Increased in inhibition of pre-mRNA splicing.

Cell Cycle Analysis^[1]

Cell Line:	HeLa and HEK293 cells
Concentration:	10 μ M, 20 μ M, or 30 μ M
Incubation Time:	4 hours, 8 hours, or 24 hours
Result:	In the presence of 10 μ M 8 hours after treatment, the proportion of cells in G2, M, and S phases increased, with a concomitant decrease in the number of G1 phase cells. This effect increased over time, with >40% of cells in G2 and M phase and >50% in S phase 24 hours.

CUSTOMER VALIDATION

- Nucleic Acids Res. 2019 Sep 5;47(15):8239-8254.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Andrea Pawellek et al. Identification of Small Molecule Inhibitors of Pre-mRNA Splicing. J Biol Chem, 2014 Dec 12, 289(50): 34683-34698.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA