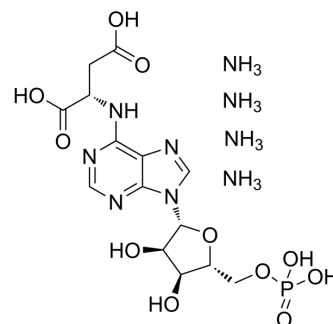


Adenylosuccinic acid tetraammonium

Cat. No.:	HY-127137A
Molecular Formula:	C ₁₄ H ₃₀ N ₉ O ₁₁ P
Molecular Weight:	531.42
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : 200 mg/mL (376.35 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.8818 mL	9.4088 mL	18.8175 mL
	5 mM	0.3764 mL	1.8818 mL	3.7635 mL
	10 mM	0.1882 mL	0.9409 mL	1.8818 mL

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

BIOLOGICAL ACTIVITY

Description

Adenylosuccinic acid tetraammonium (Adenylosuccinate; Aspartyl adenylate) is an orally active purine ribonucleoside monophosphate and plays a role in nucleotide cycle metabolite. Adenylosuccinic acid tetraammonium can be converted into fumaric acid through adenylosuccinate lyase. Adenylosuccinic acid tetraammonium has the potential for the study of duchenne muscular dystrophy(DMD)^[1].

IC₅₀ & Target

Human Endogenous Metabolite

In Vivo

Adenylosuccinic acid tetraammonium (oral administration; 3-3000 µg/mL; 6 weeks) significantly improves the features of murine DMD, it decreases the number of centronucleated fibres, lipid accumulation, connective tissue infiltration and Ca²⁺ content of mdx tibialis anterior^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C57Bl/10ScSn (normal wild-type strain; Con) and C57Bl/10mdx (mdx) mice ^[1]
Dosage:	3 µg/mL, 30 µg/mL, 300 µg/mL, 3000 µg/mL

Administration:	3 µg/mL for 3 days and 30 µg/mL for the next 4 days, and 300 µg/mL for one week, and then 3000 µg/mL for 6 weeks
Result:	Ameliorated the symptoms of murine duchenne muscular dystrophy.

REFERENCES

[1]. Timpani CA, et al. Adenylosuccinic acid tetraammonium therapy ameliorates murine Duchenne Muscular Dystrophy. Sci Rep. 2020 Jan 24;10(1):1125.

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