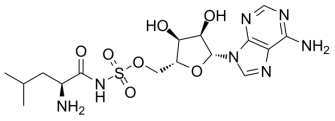
Leu-AMS

Cat. No.:	HY-108900
CAS No.:	288591-93-5
Molecular Formula:	$C_{16}H_{25}N_7O_7S$
Molecular Weight:	459.48
Target:	Aminoacyl-tRNA Synthetase; Bacterial
Pathway:	Metabolic Enzyme/Protease; Anti-infection
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 49.17 mg/mL (107.01 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	2.1764 mL	10.8819 mL	21.7637 mL
	5 mM	0.4353 mL	2.1764 mL	4.3527 mL
	10 mM	0.2176 mL	1.0882 mL	2.1764 mL

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

BIOLOGICAL ACTIVITY

Description

Leu-AMS (compound 6), a leucine analogue, is a potent inhibitor of leucyl-tRNA synthetase (LRS) with an IC_{50} of 22.34 nM, which inhibits the catalytic activity of LRS but did not affect the leucine-induced mTORC1 activation. Leu-AMS shows cytotoxicity in cancer cells and normal cells, and inhibits the growth of bacteria[1].

IC_{50} & Target

IC50: 22.34 nM (LRS)[1]

In Vitro

Leu-AMS is proved to be a potent inhibitor of Leucyl-tRNA Synthetase (LRS) with an IC_{50} value of 22.34 nM. Leu-AMS is highly cytotoxic in both cancer cells and normal cells. Leu-AMS does not affect S6 kinase (S6K) phosphorylation at all. Leu-AMS inhibits the catalytic activity of LRS but does not affect the leucine-induced mTORC1 activation[1].

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

REFERENCES

[1]. Yoon S, et al. Discovery of Leucyladenylate Sulfamates as Novel Leucyl-tRNA Synthetase (LRS)-TargetedMammalian Target of Rapamycin Complex 1 (mTORC1) Inhibitors. J Med Chem. 2016 Nov 23;59(22):10322-10328.

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