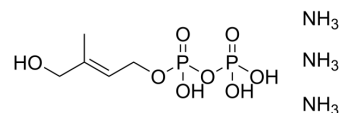


HDMAPP triammonium

Cat. No.:	HY-145498
CAS No.:	443892-56-6
Molecular Formula:	C ₅ H ₂₁ N ₃ O ₈ P ₂
Molecular Weight:	313.18
Target:	TNF Receptor
Pathway:	Apoptosis
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	PBS : 10 mg/mL (31.93 mM; Need ultrasonic and warming)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	3.1931 mL	15.9653 mL	31.9305 mL
		5 mM	0.6386 mL	3.1931 mL	6.3861 mL
10 mM	0.3193 mL	1.5965 mL	3.1931 mL		
Please refer to the solubility information to select the appropriate solvent.					

BIOLOGICAL ACTIVITY

Description	HDMAPP triammonium is a potent phosphoantigen in the ammonium form and the pyrophosphate form of (E)-HDMAPP. HDMAPP is also a potent activator of $\gamma\delta$ T cells and can induce T cell stimulation in vitro (EC ₅₀ =0.39 nM, TNF- α) ^[1] .		
IC₅₀ & Target	TNFRSF1A		
In Vitro	HDMAPP triammonium (compound 3E) (2 μ M) increases TNF- α release levels in primary polyclonal human V γ 9V δ 2 T cells and has stimulatory bioactivity ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
In Vivo	HDMAPP triammonium (compound 3E) (0.02-2.5 mg/kg; iv; 15 days) significantly increases $\gamma\delta$ cells in a cynomolgus monkey model ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.		
	Animal Model:	Nonhuman Primate Model in Cynomolgus ^[1]	
	Dosage:	0.02 mg/kg, 0.1 mg/kg, 0.5 mg/kg, 2.5 mg/kg	

Administration:	Intravenous injection; once with daily s.c. low doses IL-2 to sustain $\gamma\delta$ -T-cell proliferation, for 15 days
Result:	Significantly increased $\gamma\delta$ -cells in vivo at 0.02 mg/kg. Reached maximal effect at 2.5 mg/kg.

REFERENCES

[1]. Boëdec A, et al. Synthesis and biological activity of phosphonate analogues and geometric isomers of the highly potent phosphoantigen (E)-1-hydroxy-2-methylbut-2-enyl 4-diphosphate. J Med Chem. 2008 Mar 27;51(6):1747-54.

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