Product Data Sheet

AChE-IN-28

Cat. No.: HY-151927

Molecular Formula: $C_{33}H_{48}BrF_3N_5O_4$

Molecular Weight: 715.66

Target: Cholinesterase (ChE) Pathway: **Neuronal Signaling**

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	AChE-IN-28 (Compound 2h) is a selective slow-binding inhibitor of acetylcholinesterase with an IC $_{50}$ of 0.2 nM $^{[1]}$.	
IC ₅₀ & Target	AChE 0.2 nM (IC ₅₀)	
In Vivo	AChE-IN-28 (Compound 2h) (0.005-0.1 mg/kg; i.p.; single dose) ameliorates symptoms of myasthenia gravis in rats. The LD ₅₀ is 10 mg/kg in mice (i.p.) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Female Wistar rats, experimental autoimmune model of myasthenia gravis (EAMG) $^{\left[1 ight]}$
	Dosage:	0.005, 0.01, 0.015 and 0.1 mg/kg
	Administration:	Intraperitoneal injection, single dose
	Result:	The dose that restored the value of decrement of amplitude of APs in animals with EAMG to the level of control rats was 0.01 mg/kg. Showed a long lasting effect and had no significant effect on the force of urinary bladder contractions in animals with EAMG.

REFERENCES

[1]. Saifina LF, et al. Novel slow-binding reversible acetylcholinesterase inhibitors based on uracil moieties for possible treatment of myasthenia gravis and protection from organophosphate poisoning. Eur J Med Chem. 2022 Nov 24;246:114949.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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