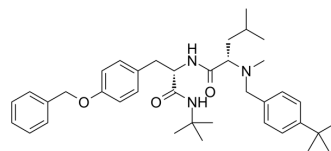


PD173212

Cat. No.:	HY-103318		
CAS No.:	217171-01-2		
Molecular Formula:	C ₃₈ H ₅₃ N ₃ O ₃		
Molecular Weight:	599.85		
Target:	Calcium Channel		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
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 : ≥ 100 mg/mL (166.71 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	1.6671 mL	8.3354 mL	16.6708 mL
	5 mM	0.3334 mL	1.6671 mL	3.3342 mL
	10 mM	0.1667 mL	0.8335 mL	1.6671 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.08 mg/mL (3.47 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	PD173212 is a selective N-type voltage sensitive calcium channel (VSCC) blocker, with an IC ₅₀ of 36 nM in IMR-32 assays.
IC₅₀ & Target	IC ₅₀ : 36 nM (VSCC) ^[1]
In Vitro	PD173212 (PD 173212, 300 nM) potently blocks recombinant B-class (N-type) calcium channel currents 78±7.8%, with an IC ₅₀ of 74 nM, by whole-cell voltage-clamp techniques. PD 173212 possesses selectivity for non L-type Ca ²⁺ channels versus neuronal Na ⁺ , K ⁺ , and L-type Ca ²⁺ channels ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	PD173212 (30 mg/kg, i.v.) shows moderate efficacy in preventing tonic seizures in the audiogenic seizure model ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Cell Rep. 2021 Nov 2;37(5):109931.

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REFERENCES

[1]. Hu LY, et al. Structure-activity relationship of N-methyl-N-alkyl-peptidylamines as novel N-type calcium channel blockers. Bioorg Med Chem Lett. 1999 Aug 2;9(15):2151-6.

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

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