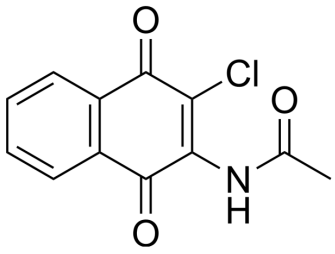
NP-313

Cat. No.:	HY-129496
CAS No.:	5397-78-4
Molecular Formula:	$C_{12}H_8ClNO_3$
Molecular Weight:	249.65
Target:	Thrombin
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (100.14 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.0056 mL	20.0280 mL	40.0561 mL
	5 mM	0.8011 mL	4.0056 mL	8.0112 mL
	10 mM	0.4006 mL	2.0028 mL	4.0056 mL

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

BIOLOGICAL ACTIVITY

Description

NP-313 is a potent antithrombotic agent that inhibits platelet aggregation and activation. NP-313 has dual inhibition of thromboxane A 2 synthesis and selective inhibition of SOCC-mediated Ca^{2+} inward flow[1].

In Vitro

NP-313 (0-80 μM) inhibits platelet aggregation in a dose-dependent manner. The maximum inhibition of platelet aggregation induced by thrombin and A23187 was approximately 80% and 60%, respectively[1].

NP-313 (0-8 μM) concentration-dependently inhibited P-selectin expression and thromboxane B 2 (TXB2) production in human platelets induced by collagen or thrombin. Also, NP-313 inhibited COX-1 and TXA 2 synthase with the IC_{50} values of 1.5 and 3.9 μM, respectively[1].

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

In Vivo

NP-313 (i.v., 4-16 μg/g) significantly prolongs occlusion time (TTO), prolongs bleeding time and inhibits platelet aggregation induced by collagen (10 μg/mL) in male ICR mice[1].

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

REFERENCES

[1]. Heng-Lan Kuo, et al. NP-313, 2-acetylamino-3-chloro-1,4-naphthoquinone, a novel antithrombotic agent with dual inhibition of thromboxane A(2) synthesis and calcium entry. Br J Pharmacol. 2011 Apr;162(8):1871-83.

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