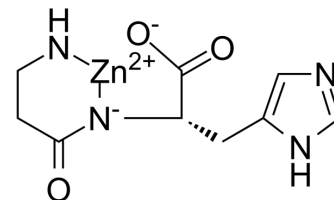


Polaprezinc

Cat. No.:	HY-B0729		
CAS No.:	107667-60-7		
Molecular Formula:	C ₉ H ₁₁ N ₄ O ₃ Zn		
Molecular Weight:	288.59		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

H₂O : 1 mg/mL (3.47 mM; ultrasonic and adjust pH to 2 with HCl)
 DMSO : < 1 mg/mL (insoluble or slightly soluble)

Concentration	Solvent	1 mg	5 mg	10 mg
	Mass			
Preparing Stock Solutions	1 mM	3.4651 mL	17.3256 mL	34.6512 mL
	5 mM	---	---	---
	10 mM	---	---	---

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

BIOLOGICAL ACTIVITY

Description

Polaprezinc is an orally bioavailable chelate composed of zinc and L-carnosine, with potential gastroprotective, antioxidant, anti-ulcer and anti-inflammatory activities.

In Vivo

Polaprezinc (PZ) is an antiulcer drug and a chelating compound consisting of a zinc ion, L-carnosine, a β-alanine dipeptide and L-histidine. Polaprezinc exerts antioxidant effects and scavenges free radicals. The efficacy of Polaprezinc is reported for acute radiation proctitis in an animal model and demonstrates that Polaprezinc has an anti-inflammatory effect following exposure to radiation^[1].

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

PROTOCOL

Animal

Mice^[1]

Administration ^[1]

Male C57BL/6J mice (8-weeks-old; weight, ~20 g) are used. The mice are acclimated for 7 days. They are housed 4-5/cage and fed a laboratory rodent pellet formula and tap water ad libitum. Mice are maintained at a constant temperature of 22°C±0.5°C, a humidity of 50%±5% and are exposed to 12 h light/dark cycles. The mice orally receive 100 mg/kg body weight Polaprezinc in the drinking water. The mice are irradiated at a dose rate of ~200 cGy/min using a 150 kVp X-ray unit. For dosimetry, a probe connected to an electrometer system is placed close to the target site. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Adv Sci (Weinh). 2023 Dec 20:e2304939.

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REFERENCES

[1]. Odawara S, et al. Polaprezinc protects normal intestinal epithelium against exposure to ionizing radiation in mice. Mol Clin Oncol. 2016 Oct;5(4):377-381.

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

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