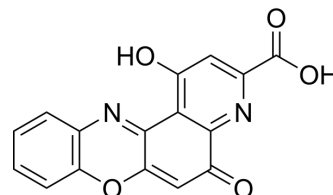


## Pirenoxine

Cat. No.:	HY-108296		
CAS No.:	1043-21-6		
Molecular Formula:	C <sub>16</sub> H <sub>8</sub> N <sub>2</sub> O <sub>5</sub>		
Molecular Weight:	308.25		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

In Vitro	DMSO : < 1 mg/mL (insoluble or slightly soluble)
	H <sub>2</sub> O : < 0.1 mg/mL (insoluble)

### BIOLOGICAL ACTIVITY

**Description** Pirenoxine (Catalin K) is a potent antioxidant. Pirenoxine shows anti-presbyopic activity. Pirenoxine has the potential for the research of cataracts<sup>[1][2]</sup>.

**In Vivo** Pirenoxine (0.005% pirenoxine; eye drop) suppresses lens hardening and prevents the progression of presbyopia<sup>[2]</sup>. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	Six-week-old male Sprague-Dawley rats <sup>[2]</sup>
Dosage:	0.005% pirenoxine
Administration:	Eye drop
Result:	Significantly suppressed lens hardening.

### REFERENCES

[1]. Upaphong P, et al. The Possible Positive Mechanisms of Pirenoxine in Cataract Formation. *Int J Mol Sci.* 2022 Aug 21;23(16):9431.

[2]. Tsuneyoshi Y, et al. Suppression of presbyopia progression with pirenoxine eye drops: experiments on rats and non-blinded, randomized clinical trial of efficacy. *Sci Rep.* 2017 Jul 28;7(1):6819.

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

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