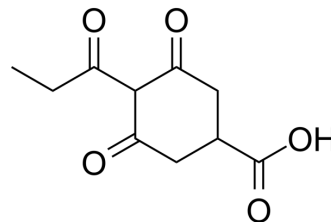


## Prohexadione

Cat. No.:	HY-112105A
CAS No.:	88805-35-0
Molecular Formula:	C <sub>10</sub> H <sub>12</sub> O <sub>5</sub>
Molecular Weight:	212.2
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

Description	Prohexadione (BX-112 free acid) is a plant growth regulator. Prohexadione inhibits gibberellin biosynthesis of plants <sup>[1][2]</sup> .
IC <sub>50</sub> & Target	Gibberellin biosynthesis <sup>[1]</sup>
In Vitro	<p>Prohexadione (1 mM) inhibits JMJD2A demethylase activity<sup>[2]</sup>.</p> <p>Prohexadione (1-2 mM) induces the differentiation of mouse neurospheres into neurons<sup>[2]</sup>.</p> <p>Prohexadione (100 mg/L, sprayed on the leaves) alleviates saline-alkali stress in soybean seedlings<sup>[3]</sup>.</p> <p>Prohexadione induces structural resistance to fire blight infection in potted apple trees<sup>[4]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

- [1]. Paulson GS, et al. Effect of a plant growth regulator prohexadione-calcium on insect pests of apple and pear. *J Econ Entomol.* 2005 Apr;98(2):423-31.
- [2]. McGrath MJ, et al. Evidence that prohexadione-calcium induces structural resistance to fire blight infection. *Phytopathology.* 2009 May;99(5):591-6.
- [3]. Vavilala DT, et al. Prohexadione, a plant growth regulator, inhibits histone lysine demethylases and modulates epigenetics. *Toxicol Rep.* 2014 Nov 4;1:1152-1161.
- [4]. Feng N, et al. Prohexadione-calcium alleviates saline-alkali stress in soybean seedlings by improving the photosynthesis and up-regulating antioxidant defense. *Ecotoxicol Environ Saf.* 2021 Sep 1;220:112369.

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

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