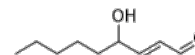


**Product Name** : 4-Hydroxynonenal  
**Cat. No.** : PC-27626  
**CAS No.** : 75899-68-2  
**Molecular Formula** : C<sub>9</sub>H<sub>16</sub>O<sub>2</sub>  
**Molecular Weight** : 156.23  
**Target** : Ferroptosis  
**Solubility** : 10 mM in DMSO



### Biological Activity

4-Hydroxynonenal (4-HNE) is a lipoperoxidation-derived aldehyde and **ALDH2 substrate** that promotes oxidative stress, induces **ferroptosis**, and aggravates myocardial injury, directly evokes myocyte ferroptosis by interacting with **GPX4** and deubiquitinase OTUD5 at cysteine residues, leading to increased ubiquitination and degradation of GPX4.

### References

- Fang H, et al. *Nat Commun.* 2026 May 21;17(1):8347.  
Li S, et al. *Redox Biol.* 2026 Jul 21;96:104314.  
Martínez-Cortés JE, et al. *Pflugers Arch.* 2026 Jun 9;478(6):56.  
Lulu Liu, et al. *Adv Sci (Weinh).* 2023 Oct;10(28):e2301852.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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