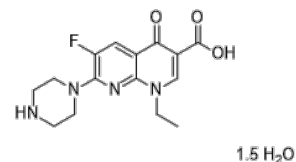


**Product Name** : Enoxacin hydrate  
**Cat. No.** : PC-23989  
**CAS No.** : 84294-96-2  
**Molecular Formula** : C<sub>15</sub>H<sub>17</sub>FN<sub>4</sub>O<sub>3.3</sub>/2H<sub>2</sub>O  
**Molecular Weight** : 347.34  
**Target** : Bacterial  
**Solubility** : 10 mM in DMSO



## Biological Activity

Enoxacin hydrate (Enoxacin sesquihydrate) is a fluoroquinolone antibiotic, interferes with DNA replication and inhibits bacterial DNA gyrase (IC<sub>50</sub>=126 µg/ml) and topoisomerase IV (IC<sub>50</sub>=26.5 µg/ml).

Enoxacin hydrate is a miRNA processing activator and enhances siRNA-mediated mRNA degradation and promotes the biogenesis of endogenous miRNAs.

Enoxacin shows potent activities against gram-positive and -negative bacteria.

Enoxacin hydrate is a cancer-specific growth inhibitor that acts by enhancing TAR RNA-binding protein 2 (TRBP)-mediated microRNA processing.

## References

Ge Shan, et al. Nat Biotechnol. 2008 Aug;26(8):933-40.

Sonia Melo, et al. Proc Natl Acad Sci U S A. 2011 Mar 15;108(11):4394-9.

M Takeji, et al. Antimicrob Agents Chemother. 2001 Dec;45(12):3544-7.

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

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