

## **Data Sheet**

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Product Name : Tetrodotoxin
Cat. No. : PC-43094
CAS No. : 4368-28-9
Molecular Formula :  $C_{11}H_{17}N_3O_8$ Molecular Weight : 319.268

Target : Sodium Channel

**Solubility** : DMSO

## **Biological Activity**

Tetrodotoxin (TTx) is a potent, highly selective **sodium channel blocker** with IC50 of 33 nM for Nav1.6. Tetrodotoxin-sensitive sodium channel (Nav) family include Nav1.1, Nav1.2, Nav1.3, Nav1.4, Nav1.6, and Nav1.7, the Nav1.5, Nav1.8, and Nav1.9 channels are TTX-resistant.

Tetrodotoxin (TTx) inhibits the firing of action potentials in neurons by binding to the voltage-gated sodium channels in nerve cell membranes and blocking the passage of sodium ions into the neuron.

## References

Rogers M, et al. Assay Drug Dev Technol. 2016 Mar;14(2):109-30.

Frelin C, et al. J Biol Chem. 1983 Jun 25;258(12):7256-9.

Reiser G, et al. Brain Res. 1983 Feb 21;261(2):335-40.

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

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