

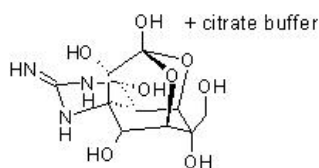
Product datasheet

Tetrodotoxin citrate, Na⁺ channel blocker ab120055

62 References 3 Images

Overview

Product name	Tetrodotoxin citrate, Na ⁺ channel blocker
Description	Na ⁺ channel blocker; water-soluble
Biological description	Water soluble citrate salt of tetrodotoxin. Potent, selective and reversible, use-dependent inhibitor of voltage-dependent Na ⁺ channels.
Purity	> 98%
General notes	To purchase this product, additional information may be required for security reasons. Please contact customer services for further details.
CAS Number	18660-81-6
Chemical structure	



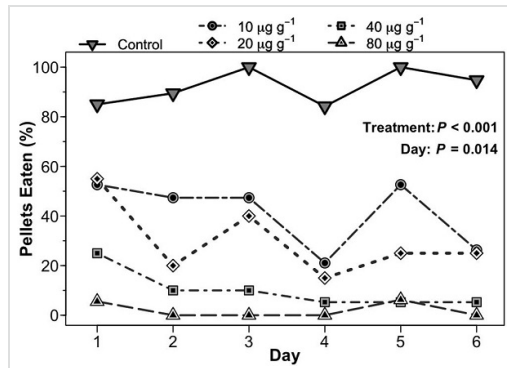
Properties

Chemical name	Octahydro-12-(hydroxymethyl)-2-imino-5,9:7,10a-dimethano-10a <i>H</i> -[1,3]dioxocino[6,5- <i>d</i>]pyrimidine-4,7,10,11,12-pentol + citrate buffer
Molecular weight	319.27
Molecular formula	C ₁₁ H ₁₇ N ₃ O ₈
Storage instructions	Store at -20°C. Store under desiccating conditions. The product can be stored for up to 12 months.
Solubility overview	Soluble in water
Handling	Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour. Toxic, refer to SDS for further information. Need more advice on solubility, usage and handling? Please visit our frequently asked questions (FAQ) page for more details.
SMILES	<chem>O=C(O)C(O)(CC(=O)O)CC(=O)O.O[C@H]3C14NC(=N)N[C@H](O)</chem>

Source

Fugu

Images

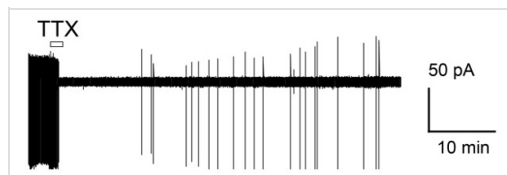


Percent of TTX-containing food pellets eaten by bluegill over 6 d of repeated feedings.

Pellets were infused with different concentrations of TTX within the range found in newts from the field. *P* values are from likelihood ratio tests from a GLMM.

Functional Studies - Tetrodotoxin citrate, Na⁺ channel blocker (ab120055)

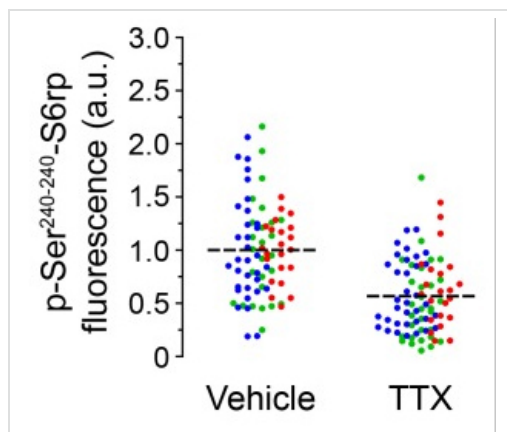
Marion and Hay PLoS One. 2011;6(12):e27581. doi: 10.1371/journal.pone.0027581. Epub 2011 Dec 2. Fig 5.



Cell-attached recording of a striatal cholinergic interneuron depicting TTX (100 nM) inhibition of spontaneous action potential firing. The open bar indicates time of TTX application.

Functional Studies - Tetrodotoxin citrate (ab120055)

Image from Bertran-Gonzalez J et al., PLoS One. 2012;7(12):e53195. Fig 3(A).; doi: 10.1371/journal.pone.0053195.



Quantification of the p-S6rp signal in each striatal ChAt immunoreactive neuron after 1 hour incubation in control or TTX (1 M). Each dot corresponds to one neuron; each color corresponds to a different animal; dashed lines indicate the mean. Fluorescence values are normalized in arbitrary units (a.u.).

Functional Studies - Tetrodotoxin citrate (ab120055)

Image from Bertran-Gonzalez J et al., PLoS One. 2012;7(12):e53195. Fig 3(C).; doi: 10.1371/journal.pone.0053195.

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