FluoProbes[®]



Tetrodotoxin

Reversible blocking reagent of the excitable sodium channels

Product Information

Name :	Tetrodotoxin (TTX)
	Octahydro-12-(hydroxymethyl)-2-imino-5,9:7,10a-dimethano- 10aH-[1,3]dioxocino[6,5-d]pyrimidine-4,7,10,11,12-pentol.
	CAS [4368-28-9]
Catalog Number :	FP-31496A, 1mg citrate free FP-AM332A, 1mg with citrate
Molecular Weight :	MW= 319.28
Solubility:	Soluble in water and ether; Insoluble in organic solvents.



Technical information

•Purity: >98%

LIFE SCIENCES

•Storage before reconstitution: desiccated Lyophilized powder can be stored at room temperature for several weeks. For longer periods, it should be stored at -20°C. Storage and stability after reconstitution:

Up to one week at 4° C or six months at -20° C.

•Reconstitution: Aqueous buffer (citrate free: acidic buffer pH 4.8) Avoid alkaline or strongly acidic solution

•Caution: Please keep our products under -20°C for long-term storage For Research Use Only Not For Human Use or Veterinary Use or Therapeutic Use Not fully tested

•Biological Activity: Tetrodoxin reversibly blocks the excitable volt-gated sodium channels. It is used widely to study excitable membranes, including nerves, skeletal cells, cardiac cells.

•Toxicity: Oral Mouse LD50: 334ug/kg

FluoProbes[®], powered by





FT-31496A

Intravenous Mouse, LD50:7.3ug/kg

References

LIFE SCIENCES

Hille, B. (2001) Ion Channels in Excitable Membranes (Third Edition) Chapter 3

Hu, S.L. and Kao, C.Y. Toxicon 23, 723(1985);

Lysko, P.G. et al. Stroke 25, 2476(1994);

Nakamura, M. and Yasumoto, T. Toxicon 23, 271(1985).

Kao (1972) Pharmacology of tetrodotoxin and saxitoxin. Fed.Proc.31 1117. PMID: 5032475 .

Catterall WA Neurotoxins that act on voltage - sensitive sodium channels in excitable membranes. Annu Rev Pharmacol Toxicol 20 :15 - 43 (1980). <u>Abstract</u>

Kao (1986) Structure - activity relations of tetrodotoxin, saxitoxin, and analogues. Ann.N.Y.Acad.Sci. 479 52. PMID: 2434008.

Narahashi T et al. Recent advances in the study of mechanism of action of marine neurotoxins. Neurotoxicology 15 :545 - 54 (1994). Abstract

Gleitz et al (1996) The protective action of tetrodotoxin and (\pm) - kavain on anaerobic glycolysis, ATP content and intracellular Na + and Ca 2+ of anoxic brain vesicles. Neuropharmacology 35 1743. PMID: 9076753.

Hille, B. (2001) Ion Channels in Excitable Membranes (Third Edition) Chapter 3.

Related Products

- Phalloidin FluoProbes 647H, BZ9630
- A-23187 Free Acid, 28362A

Hotline +33 4 70 03 73 06 • interbiotech@interchim.com

• Transferrin (human)-CF568, IWU470

Ordering information

Catalog size quantities and prices may be found at <u>http://www.fluoprobes.com</u> Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes[®] / Interchim; Hotline : +33(0)4 70 03 73 06

Disclaimer : Materials from FluoProbes[®] are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. FluoProbes[®] is not liable for any damage resulting from handling or contact with this product.

FluoProbes[®], powered by