

# Toxic components derived from marine organisms Maitotoxin and Ciguatoxin CTX 1B

Marine toxins are natural poisons possessed by fish and shellfish and cause food poisoning. Marine toxins are not only found in fish and shellfish, but also in microalgae or marine algae such as marine microorganisms and plankton, which are bio-concentrated by the food chain and cause poisoning in humans who eat them. Furthermore, global climatic changes have been accompanied by changes in the distribution of marine poisons, and the areas where food poisoning occurs are also changing. Therefore, research on various marine toxins is in progress. Fujifilm Wako provides a variety of reagents and kits related to marine toxins.

For Ciguatoxin Analysis

### Ciguatoxin CTX 1B, CTX 3C

Ciguatera food poisoning is the world's largest marine poisoning with over 50,000 people poisoning per year. It is a very strong neurotoxin, and the causative agent is ciguatoxins (CTX), which are produced by toxic dinoflagellates. There are numerous analogues of CTX, and we provide the CTX 3C and CTX 1B.

#### Maitotoxin

Maitotoxin (MTX) is produced by dinoflagellate (*Gambierdiscus toxicus*). And it is named Maitotoxin after the Tahitian name of Striated surgeonfish "maito", which is a cause of ciguatera poisoning. MTX is the largest natural organic compound, which known structural formula. Since MTX exhibits a specific intracellular uptake of extracellular Ca<sup>2+</sup>, it has attracted attention for the mechanism of signal transduction mediated by Ca<sup>2+</sup>.

#### **CTX ELISA 1B**

Product List

The world's first ELISA kit that detects CTX1B and 54-deoxyCTX1B in a wide concentration range (0.2-0.0005 ppb).

- ✓ Easy
  - Can quantify easily by using sandwich ELISA.
  - Can measure within two hours.
- ✓ Specificity Be Specific for CTX1B and 54-deoxyCTX1B,
  - and no cross-reactivity with other CTXs.
  - High sensitivity Can detect 5 to 200 pg / mL (ppt) by colorimetric method.



in the state				
Code No.	Product Name		Grade / Manufacture	Volume
038-25801	CiguatoxinCTX 1B	F°	for Biochemistry	100 ng
030-21581	CiguatoxinCTX 3C	$\mathbf{F}^{\circ}$	for Biochemistry	100 ng
131-19011	Maitotoxin	F	for Biochemistry	10 µg
382-14341	CTX-ELISA 1B	Ref	Bold Biotechnology Co., Ltd.	1 kit

Wako

Ciguatoxin 3C (CTX3C)

Maitotoxin

**Related Product List** 

Code No.	Product Name	Grade	Volume			
■ Fish Poison						
165-26141	Palytoxin	for Biochemistry	100 µg			
■ Shellfish Poison						
156-03551	OA • DTX1 Mixture Standard Solution (each 1mg/L Methanol Solution)	, for Food Analysis	2 mL			
152-03271	Okadaic Acid	for Biochemistry	25 µg			
158-03273	Okadaic Acid	for Biochemistry	100 µg			
Sponge Poison						
038-14453	Calyculin A	for Biochemistry	10 µg			
032-14451		for Biochemistry	100 µg			
132-12081	Mycalolide B	for Biochemistry	100 µg			
193-11831	Stellettamide A Trifluoroacetate	for Biochemistry	100 µg			

\* Toxins may not be available depending on the country. Please check with your distributor before purchasing.

Please check our website for details. TOP > Analytical Chemistry > Food Analysis > Marine Toxins

https://labchem-wako.fujifilm.com/us/category/01103.html



Listed products are intended for laboratory research use only, and not to be used for drug, food or human use. / Please visit FUJIFILM Wako Laboratory Chemicals site: https://labchem-wako.fujifilm.com/ / This leaflet may contain products that cannot be exported to your country due to regulations. / Bulk quote requests for some products are welcomed. Please contact us.

## **FUJIFILM Wako Laboratory Chemicals site** https://labchem-wako.fujifilm.com



FUJIFILM Wako Pure Chemical CorporationFUJIFILM Wako Chemicals U.S.A. Corporation1-2, Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan1600 Bellwood Road, Richmond, VA 23237, U.S.A.Tel: +81 6 6203 3741Fax: +81 6 6203 1999ffwk-cservise@fujifilm.comToll-Free (U.S. only): +1 877 714 1920rel: +1 804 271 7677Fax: +1 804 271 7791wkuslabchem@fujifilm.comwkuslabchem@fujifilm.com

Room 1111, 11/F, International Trade Centre, 11-19 Sha Tsui Road, Tsuen Wan, N.T., Hong Kong Tel: +852-2799-9019 Fax: +852-2799-9808 wkhk.info@fujifilm.com

FUJIFILM Wako Chemicals (Hong Kong) Limited FUJIFILM Wako (Guangzhou) Trading Corporation Room 3003, 30/F., Dong Shan Plaza 69, Xian Lie Zhong Road,

FUJIFILM Wako Chemicals Europe GmbH

Fuggerstr 12, 41468 Neuss, Germany Tel: +49 2131 311 0 Fax: +49 2131 311 100

labchem\_wkeu@fujifilm.com

Guangzhou, 510095, China Tel: +86-21-6288-4751(Shanghai) Tel: +86-10-6413-6388(Beijing) wkgz.info@fujifilm.com