

## ELENCO MATERIALI DI RIFERIMENTO

Elenco dei materiali di riferimento/standard (ficotossine) commercialmente disponibili

(*Il LNR-BM dichiara l'insussistenza di conflitto di interesse, anche solo potenziale, con alcuna delle ditte di seguito elencate*)

### BIOTOSSINE MARINE REGOLAMENTATE

MATERIALI DI RIFERIMENTO/STANDARD		FORNITORI
AZASPIRACID GROUP	AZA1; AZA2; AZA3; AZA toxins	NRC-Canada
	AZA1; AZA2; AZA3; AZA5; AZA4	Laboratorio CIFGA
	AZA1; AZA2; AZA3	Santa Cruz Biotechnology, Inc.
	AZA1; AZA2; AZA3; Mussels tissue	Novakits
	AZA1; AZA2; AZA3; Mussel tissue with: AZA1, AZA2, AZA3	Lab Service Analytica
DOMOIC ACID GROUP	DA	BlueBioTech
	Domoic Acid	Merck KGaA
	Domoic Acid	Laboratorio CIFGA
	Domoic Acid	NRC-Canada
	Domoic Acid	Sigma-Aldrich Co.
	Domoic Acid	Enzo Life Sciences, Inc.
	Domoic Acid	Santa Cruz Biotechnology, Inc.
	Acide domoique Mussel tissue	Novakits
	Mussel tissue with domoic acid; DA	Lab Service Analytica
MULTIPLE MARINE TOXIN	CRM-FDMT1 miscela di: (DA+5'-epi-DA), (AZA1+37-epi-AZA-1), (AZA2+37-epi-AZA-2), (AZA3+37-epi-AZA-3), OA, DTX1, DTX2, YT), PTX2, (13-desMe-SPX C);	NRC-Canada
	Mussel matrix with DSP toxins: OA, DTX1, DTX3	Laboratorio CIFGA
NEGATIVE CONTROL: BLANK MUSSEL REFERENCE MATERIAL	Mus Zero	NRC-Canada
	Mussel tissue	Novakits
OKADAIC ACID GROUP	OA; DTX-1	BlueBioTech
	Okadaic acid; InSolution™ Okadaic acid; Okadaic acid, Ammonium salt; Okadaic acid, Potassium salt; Okadaic acid, Sodium salt;	Merck KGaA
	Okadaic acid; Okadaic acid, Ammonium salt; Okadaic acid, Sodium salt; Okadaic acid, Potassium salt; Okaic acid, methyl ester; Okadaic acid, C8-diol ester	Enzo Life Sciences, Inc.
	Okadaic acid; 7-O-Palmitoyl Okadaic Acid; DTX1; DTX2	Laboratorio CIFGA
	Okadaic acid; Okadaic acid, Ammonium salt; Okadaic acid, Sodium salt; Okadaic acid, C8-diol ester; Okaic acid, methyl ester; Okadaic acid potassium salt; Okadaic acid, Sodium salt; Okadaol;	Axxora, LLC
	Okadaic acid; Okadaic acid, DTX-1, DTX-2; DTX-1; DTX-2;	NRC-Canada

## ELENCO MATERIALI DI RIFERIMENTO

	Okadaic acid, free acid; Okadaic acid, Ammonium salt; Okadaic acid, Sodium salt; Okadaic acid, Potassium salt;	LC Laboratories
	Okadaic acid potassium salt from <i>Prorocentrum concavum</i> ; Okadaic acid ammonium salt from <i>Prorocentrum concavum</i> ; Okadaic acid sodium salt from <i>Prorocentrum concavum</i> ; Okadaic acid solution; Okadaic acid, Potassium salt; Okadaic acid, <i>Prorocentrum</i> sp.	Sigma-Aldrich Co.
	Acide okadaique; Mussel tissue (OA); Dinophysis toxine 1; Dinophysis toxine 2; Mussel tissue (DTX)	Novakits
	DTX1; DTX2; OA; Mussel tissue with: OA, DTX1, DTX2	Lab Service Analytica
	<b>Mussel matrix with DSP toxins (OA; DTX-1; DTX-3)</b>	Laboratorio CIFGA
PECTENOTOXIN GROUP	Pectenotoxin-2	NRC-Canada
	Pectenotoxine-2	Novakits
	Pectenotoxin-2	Lab Service Analytica
SAXITOXIN GROUP	STX; GTX;	BlueBioTech
	Pacific oyster PSP toxin matrix CRM;	CEFAS
	Saxitoxin in acetic acid; Mussel Tissue;	European Commission – Directorate General Joint Research Centre
	Saxitoxin; Gonyautoxins 2&3; N-sulfocarbamoyl- gonyautoxins 2 & 3: C1 & C2; Decarbamoylgonyautoxins- 2&3; Gonyautoxin-5; Decarbamoylsaxitoxin; Neosaxitoxin; Decarbamoylneosaxitoxin; Gonyautoxins 1 & 4; Gonyautoxin 6;	Laboratorio CIFGA
	FDA SaxitoxinDihydrochloride Solution;	NIST
	Saxitoxin dihydrochloride; Neosaxitoxin; Decarbamoylsaxitoxin; Decarbamoylneosaxitoxin; Gonyautoxin-1 & Gonyautoxin-4; Gonyautoxin-2 & Gonyautoxin-3; Gonyautoxin-5; Decarboylgonyautoxin-2 & Decarbamoylgonyautoxin-3; N-sulfocarbamoyl-gonyautoxins 2&3:C1&C2; Gonyautoxin-6-b;	NRC-Canada
	N-Sulfocarbamoyl-Gonyautoxin-1 et 4 purified (C3 & 4);	Novakits
	Neosaxitoxin; Neosaxitoxin solution; Neosaxitoxin-15N7 solution; Saxitoxin-15N7 dihydrochloridesolution; Saxitoxin dihydrochloride solution	Sigma-Aldrich Co.
	C1&C2; Decarbamoyl-gonyautoxin 2&3; dcNEO; dcSTX; GTX-1&4; GTX-2&3; GTX5; GTX6; NEO; STX;	Lab Service Analytica
YESSOTOXIN GROUP	Yessotoxin; Homoyessotoxin Yessotoxin; Homoyessotoxin	NRC-Canada Laboratorio CIFGA
	YTX	BlueBioTech
	Homoyessotoxine; Yessotoxine	Novakits
	Homoyessotoxin; YTX	Lab Service Analytica

## ELENCO MATERIALI DI RIFERIMENTO

### BIOTOSSINE MARINE A RISCHIO EMERGENTE

MATERIALI DI RIFERIMENTO/STANDARD		FORNITORI
CICLIC IMINES GROUP	SPIROLIDES (13-desmethyl spirolide C); GYMNO DIMINE; PINNATOXIN: PnTXG	NRC-Canada
	20-methyl spirolide G; 13-didesmethyl spirolide C; 13,19-didesmethyl spirolide C;	Laboratorio CIFGA
	13-desmethyl spirolide C (SPX1)	Novakits
	13-desmethyl spirolide C (SPX1)	Lab Service Analytica
	PINNATOXINS (PnTX E, PnTXF, PnTXG)	Sigma-Aldrich Co.
	Tissu de moule – Mytilus edulis – Traces de spirolides et pinnatoxines	Novakits
	Gimnodimine; Pinnatoxin-G; Portimine	Novakits
	Gimnodimine; Pinnatoxin-G	Lab Service Analytica
TETRODOTOXIN GROUP	Tetrodotoxin;	NRC-Canada
	Tetrodotoxin; Tetrodotoxin with citrate buffer;	Sigma Aldrich Co.
	Tetrodotoxins	Enzo Life Science, Inc.
PALYTOXINS GROUP	Palytoxin	FUJIFILM
CIGUATOXIN GROUP	CTX 3C; CTX 1B	FUJIFILM
	Gambierone; 44-methyl-Gambierone	Laboratorio CIFGA

### CIANOTOSSINE

MATERIALI DI RIFERIMENTO/STANDARD		FORNITORI
CYANOTOXINS GROUP	Anatoxin-a; Cylindrospermopsin; Microcystins; Microcystin HilR; Microcystin LA; Microcystin LR, Microcystin LF; Desmethyl Microcystin LR; Microcystin LW; Microcystin LY; Microcystin RR; Desmethyl Microcystin RR; Microcystins/Nodularins (ADDA); Microcystin WR; Microcystin YR; Microcystins MDL; Saxitoxins; BMAA	Eurofins Abraxis
	L-BMAA hydrochloride	Sigma-Aldrich Co.
	Anatoxin-a; Toxins from Cylindrospermopsis (Cylindrospermopsin); Toxins from Microcystis (Microcystin LR; Microcystin RR; Microcystin LR-RR-YR; Microcystin LW; Microcystin LF; Microcystin LY); Toxins from Planktothrix ([D-Asp3,(E)-Dhb7]-Microcystin RR); Toxin from Nodularia (Nodularin);	Cyano Biotech GmbH
	Anatoxin-a; Cylindrospermopsin;	Lab Service Analytica
	Microcystin-LR; Microcystin-RR; Microcystin-LF; Microcystin-LY; Microcystin-YR; Cylindrospermopsin; Anatoxin-a; Nodularin;	Laboratorio CIFGA

(Rev.3 del 17/03/2021)  
*(in giallo modifiche rispetto alla versione precedente)*