

Elenco dei materiali di riferimento/standard commercialmente disponibili

(Il LNR-BM dichiara l'insussistenza di situazioni, anche potenziali, di conflitto di interesse, con le Ditte sotto elencate)

BIOTOSSINE MARINE REGOLAMENTATE

MATERIALI DI RIFERIMENTO/STANDARD		FORNITORI
AZASPIRACID GROUP	AZA1; AZA2; AZA3; AZA mussel tissue (AZA: 1,2,3); RM-AZA123;	NRC-CNRC (Canada)
	AZA1; AZA2; AZA3; AZA4; AZA5	Laboratorio CIFGA
	AZA1; AZA2; AZA3	Santa Cruz Biotechnology, Inc.
	AZA1; AZA2; AZA3; Mussel tissue with: AZA1, AZA2, AZA3;	Novakits
	AZA1; AZA2; AZA3; Mussel tissue with: AZA1, AZA2, AZA3;	Lab Service Analytica
DOMOIC ACID GROUP	Domoic Acid	Sigma-Aldrich/Merck
	Domoic Acid	Laboratorio CIFGA
	Domoic Acid; Domoic acid Mussel tissue; Isodomoic acid	NRC-CNRC (Canada)
	Domoic Acid	Enzo Life Sciences
	Acide domoique Mussel tissue; Domoic Acid	Novakits
	Mussel tissue with domoic acid; DA;	Lab Service Analytica
	Domoic Acid	Axxora
	Domoic Acid; isodomoic Acid G	Biocrick
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); Okadaic acid Mussel tissue (OA, DTX1, DTX2, DA+epiDA)	NRC-CNRC (Canada)
	Mussel tissue with: OA, DTX1, DTX2, Domoic Acid	Lab Service Analytica
NEGATIVE CONTROL: BLANK MUSSEL REFERENCE MATERIAL	Mus Zero	NRC-CNRC (Canada)
	Mussel tissue	Novakits
OKADAIC ACID GROUP	Okadaic acid; InSolution™ Okadaic acid; Okadaic acid, Ammonium salt; Okadaic acid, Potassium salt; Okadaic acid, Sodium salt; Okadaic acid <i>Prorocentrum</i> sp.	Sigma-Aldrich/Merck
	Okadaic acid (high purity); Okadaic acid ammonium salt (high purity); Okadaic acid potassium salt (high purity); Okadaic acid sodium salt (high purity);	Enzo Life Sciences
	Okadaic acid; 7-O-Palmitoyl Okadaic Acid; DTX1; DTX2; Mussel matrix DSP toxins (OA, DTX1, DTX3)	Laboratorio CIFGA
	Okadaic acid; Okadaic acid (high purity); Okadaic acid, Sodium salt; Okadaic acid, Ammonium salt; Okadaic acid, Ammonium salt (high purity); Okadaic acid antibody; Okadaic acid potassium salt (high purity); Okadaic acid, Sodium salt (high purity); Okadaol.	Axxora
	Okadaic acid; Okadaic acid, DTX-1, DTX-2; DTX-1; DTX-2; Okadaic acid Mussel tissue (OA, DTX1, DTX2, DA+epiDA)	NRC-CNRC (Canada)
	Okadaic acid, free acid; Okadaic acid, Ammonium salt; Okadaic acid, Sodium salt; Okadaic acid, Potassium salt;	LC Laboratories

ELENCO MATERIALI DI RIFERIMENTO

	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.; Okadaic acid, sodium salt; Okadaic acid ammonium salt; Okadaic acid from <i>P. concavum</i>	Sigma-Aldrich/Merck
	Acide okadaïque; Dinophysis toxine 1 (DTX1); Dinophysis toxine 2 (DTX2); Mussels tissue with: AO, DTX1	Novakits
	DTX1; DTX2; OA;	Lab Service Analytica
	OA-DTX1 mixture	FUJIFILM Waco Ch. U.S.A. Inc.
	Okadaic acid	Biocrick
	Okadaic acid; DTX1	Cayman Chemical
SAXITOXIN GROUP	Pacific oyster PSP toxin matrix CRM;	CEFAS
	Saxitoxin in acetic acid; Mussel (STX, dc-saxitoxin);	EC – Directorate General Joint Research Centre
	Saxitoxin; Gonyautoxins 2&3 (GTX 2&3); N-sulfocarbamoyl- gonyautoxins 2&3 (C1&C2); Decarbamoylgonyautoxins- 2&3 (dcGTX 2&3); Gonyautoxin-5 (GTX5); Decarbamoylsaxitoxin (dcSTX); Neosaxitoxin (NEO); Decarbamoylneosaxitoxin (dcNEO); Gonyautoxins 1&4 (GTX 1&4); Gonyautoxin 6 (GTX6); N-sulfocarbamoyl gonyautoxins 1&4 (C3&C4)	Laboratorio CIFGA
	FDA Saxitoxin Dihydrochloride Solution;	NIST
	Saxitoxindihydrochloride (STX); Neosaxitoxin (NEO); Decarbamoylsaxitoxin (dcSTX); Gonyautoxin 2&3 (GTX 2&3); Decarbamoylneosaxitoxin (dcNEO); Gonyautoxin 1&4 (GTX 1&4); Gonyautoxin 5 (GTX5); Decarboylgonyautoxin 2&3 (dcGTX2&3); N-sulfocarbamoyl-gonyautoxins 2&3 (C1&C2); Gonyautoxin 6 (GTX6); PSP Mussel tissue (STX, GTX2, GTX3)	NRC-CNRC (Canada)
	N-Sulfocarbamoyl-Gonyautoxin-1 et 4 purified (C3&C4); N-Sulfocarbamoyl-Gonyautoxin-2 et 3 purified (C1&C2); Decarbomoyl gonyautoxin 2 et 3 (dcGTX2&3); Decarbomoyl neo-saxitoxine (dcNEO); Decarbomoyl saxitoxine (dcSTX) Gonyautoxine 1 et 4 (GTX 1&4); Gonyautoxine 2 et 3 (GTX 2&3); Gonyautoxine 5 (GTX5); Neosaxitoxine (NEO); Saxitoxine diHydrochloride;	Novakits
	C1&C2; Decarbamoyl-gonyautoxin 2&3 (dcGTX2&3); dcNEO; dcSTX; GTX-1&4; GTX-2&3; GTX5; GTX6; NEO; STX;	Lab Service Analytica
	Saxitoxin in acetic acid (determination in mussel); Saxitoxin dihydrochloride solution; Neosaxitoxin- ¹⁵ N ₇ solution; Mussel (dc-saxitoxin); Saxitoxin- ¹⁵ N ₇ dihydrochloride solution; Neosaxitoxin solution (neoSTX); N-Sulfocarbamoylsaxitoxin solution (GTX5); GTX-6 solution	Sigma-Aldrich/Merck
	Saxitoxins; [15N]7 Saxitoxin dihydrochloride;	Eurofins Abraxis Gold Standard diagnostic Horsham Inc

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MATERIALI DI RIFERIMENTO/STANDARD		FORNITORI
YESSOTOXIN GROUP	Yessotoxin (YTX); Homoyessotoxin (hYTX)	NRC-CNRC (Canada)
	Yessotoxin; Homoyessotoxin	Laboratorio CIFGA
	Homoyessotoxin; Yessotoxin	Novakits
	Homoyessotoxin; YTX	Lab Service Analytica

BIOTOSSINE MARINE A RISCHIO EMERGENTE

MATERIALI DI RIFERIMENTO/STANDARD		FORNITORI
CICLIC IMINES GROUP	SPX1 (13-desmethyl spirolide C); Gymnodimine; Pinnatoxin-G	NRC-CNRC (Canada)
	20-methyl spirolide G; 13-didesmethyl spirolide C; 13,19-didesmethyl spirolide C;	Laboratorio CIFGA
	13-desméthyl spirolide C (SPX1); Tissu de moule – Mytilus edulis – Traces de spirolides et pinnatoxines; Pinnatoxin-H e G; Portimine; Gimnodimine;	Novakits
	13-desméthyl spirolide C (SPX1); Pinnatoxin-G; Gymnodimine	Lab Service Analytica
	Pinnatoxins: PnTX E; PnTXF; PnTXG; Gymnodimine solution	Sigmaaldrich/Merck
BREVETOXINS	PbtX1; PbTX2; PbTX3; BTXB5	Novakits
	BTX1; BTX2; BTX3; Brevetoxin PbTx-2, <i>Ptychodiscus brevis</i> ; Brevetoxin PbTx-3, <i>Ptychodiscus brevis</i>	Sigmaaldrich/Merck
	BTX2; BTX3; PbTx-1; BTX3 42-carboxylic Acid	Axxora
TETRODOTOXIN GROUP	Tetrodotoxin	NRC-CNRC (Canada)
	Tetrodotoxin	Enzo Life Science
	Tetrodotoxin, 4,9-anhydro; Tetrodotoxin and 4-epi Tetrodotoxin; Tetrodotoxin	Laboratorio CIFGA
	Tetrodotoxin; Tetrodotoxin Citrate	Axxora
	Tetrodotoxin (citrate free); Tetrodotoxin (citrate); 4,9-Anhydrotetrodotoxin	Cayman Chemical
Tetrodotoxin	Biocrick	
PALYTOXINS GROUP	Palytoxin	FUJIFILM Waco Ch. U.S.A. Inc.
CIGUATOXIN GROUP	CTX 3C; CTX ELISA 1B; Maitotoxin; CTX 1B;	FUJIFILM Waco Ch. U.S.A. Inc.
	Gambierone; 44-methyl-Gambierone	Laboratorio CIFGA

CIANOTOSSINE

	MATERIALI DI RIFERIMENTO/STANDARD	FORNITORI
CYANOTOXINS GROUP	Anatoxin-a; Dihydroanatoxin-a cis, Homo-anatoxin-a, 13 C4-(+)-Anatoxin-a, Cylindrospermopsin; 7-epi-Cylindrospermopsin; 7-deoxy-Cylindrospermopsin; Microcystins; Microcystin HiLR; Microcystin LA; Microcystin LR, Microcystin LF; Microcystin LW; Microcystin LF Deuterated; Desmethyl Microcystin LR; Microcystin LR Deuterated; Microsystin LR Ethylated; Microcystin LY; Microcystin RR; Desmethyl Microcystin RR; Microcystins/Nodularins (ADDA); Microcystins/Nodularins (ADDA) Spiking Solution; Microcystins LR Check Samples; Microcystins MDL Study Solution; Microcystin WR; Microcystin YR; Saxitoxins; Nodularins; BMAA; BMAA D3	Eurofins Abraxis Gold Standard diagnostic Horsham Inc.
	Anatoxin-a; Toxins from <i>Cylindrospermopsis</i> (Cylindrospermopsin); Toxins from <i>Microcystis</i> (Microcystin LR; Microcystin RR; Microcystin YR; Microcystin LR-RR-YR; Microcystin LW; Microcystin LF; Microcystin LY; Toxins from <i>Planktothrix</i> ([D-Asp ³ ,(E)-Dhb ⁷]-Microcystin RR); Toxin from <i>Nodularia</i> (Nodularin);	Cyano Biotech GmbH
	Anatoxin-a; Cylindrospermopsin; Microcystin?LR; Microcystin?RR; Nodularin?R;	Lab Service Analytica
	Microcystin-LR; Microcystin-RR; Microcystin-LF; Microcistin-LY; Microcistin-YR; Cylindrospermopsin; Anatoxin-a; Nodularin;	Laboratorio CIFGA
	Microcistin-RR; Microcistin-LA; Microcistin LR; 7dmMicrocistin-LR; Anatoxin-a; Nodularin	NRC-CNRC (Canada)
	Microcystin-LR; Microcystin-RR; Microcystin-YR; Microcistin-LA; Microcistin-LF; Microcistin-LW; Microcistin-LY, Microcistin-WR; Desmethyl-LR; Microcystine HiLR; Nodularin; MIX-MC: LR, RR, YR; MIX-MC: LR, RR, YR, LA, Nodularine; MIX: MC LR,RR,YR,LA,LF,LW,LY, Nodularine Cylindrospermopsine; 7-deoxycylindrospermopsine; 7-epi-cylindrospermopsine; Anatoxine-a; HomoAnatoxine-a; dihydroanatoxine-a; L-BMAA; BMAA hydrochloride	Novakits
	L-BMAA hydrochloride; β-N-Methyl-d ₃ -amino-DL-alanine- ¹⁵ N ₂ ; Nodularin; Nodularin solution; Cylindrospermopsin solution; Microcystin-LR solution; Microcystin RR-YR-LR solution; Microcystin-RR solution	Sigma-Aldrich/Merck
	Cylindrospermopsin; Nodularin; Nodularin (linear); [D-Asp ³]microcystin-RR; [D-Asp ³]microcystin-LR; Microcystin-LA; Microcystin-LF; Microcystin-LR (Analytical Standard); Microcystin-LR; Microcystin-RR; Microcystin-LW; Microcystin-LY; Microcystin-RR (Analytical Standard); Microcystin-YR; Microcystin-WR	Enzo Life Sciences

ELENCO MATERIALI DI RIFERIMENTO

	Cylindrospermopsin; [D-Asp3]microcystin-RR; [D-Asp3]microcystin-LR; Microcystin-LR monoclonal antibody; Microcystin-HilR; Microcystin-HtyR; Microcystin-LA; Microcystin-LF; Microcystin-LR; Microcystin-LR (Analytical Standard); Microcystin-LY; Microcystin-RR; Microcystin-LW; Microcystin-YR; Microcystin-WR; Microcystins (Adda specific) ELISA kit; Nodularin;	Axxora
	Microcystin-LR	Biocrick

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(in giallo evidenziate le integrazioni rispetto alla versione precedente)