



List of Cyclic Imines Toxins Reference Materials Commercially Available

European Union Reference Laboratory for Monitoring of Marine Biotoxins
(EURLMB)CITEXVI (Ciudad Tecnológica de Vigo)
Fonte das Abelleiras, 4
Campus Universitario de Vigo. As Lagoas-Marcosende
36310 Vigo (Spain)

E-mail: eurlmb@aesan.gob.es <https://www.aesan.gob.es/en/CRLMB/web/home.html>

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7. CYCLIC IMINES TOXINS

National Research Council Canada, NRC-CNRC				
1411 Oxford Street. Halifax, Nova Scotia B3H 3Z1 Canada				
Tel.: 1-902 426-8281 / Fax: 1-902 426-5426				
Email: CRM-MRCBiotoxin-Biotoxines@nrc-cnrc.gc.ca // CRM-MRCHalifax@nrc-cnrc.gc.ca				
Website: https://nrc.canada.ca/en/certifications-evaluations-standards/certified-reference-materials/list				
Name	Sales Name	Concentration	Amount	Comments
13-desmethyl spirolide C	CRM-SPX1-b	7.25±0.35 µmol/L	0.5 mL	Each ampoule contains ~0.5 mL of a solution of 13-desmethylspirolide C in methanol with 0.05% trifluoroacetic acid at a concentration of approximately 7 µmol/L.
Gymnodimine	CRM-GYM-b	4.93±0.26 µmol/L	0.5 mL	Each ampoule contains ~0.5 mL of a solution of GYM in methanol at a concentration of 4.93 µM
Pinnatoxin-G	CRM-PnTX-G	2.77±0.13 µmol/L	0.5 mL	Each ampoule contains ~0.5 mL of a 2.77 µmol/ L solution of PnTX-G in methanol (with 0.01% acetic acid)

Laboratorio CIFGA S.A.				
Av. Benigno Rivera 56, 27003, Lugo, Spain - Tel.: (+34) 982 816 715				
Email: info@cifga.com /				
Website: http://www.cifga.es/				
Name	Sales Name	Concentration	Amount	Comments
20-methyl spirolide G	00-SPX20G Lot: 11-001	7.01 ± 0.61 µg/mL Purity ≥ 97%	3.50 µg in 0.5 mL	Liquid. In methanol with TFA 0.05% (v/v). Not certified
13-desmethyl spirolide C	00-13-desMeC Lot: 22-001	7.28 ± 0.30 µg/mL Purity ≥ 99%	3.50 µg in 0.5 mL	Liquid. In methanol with TFA 0.05% (v/v). Not certified
13,19-didesmethylspirolide C	00-13,19-didesMeC Lot: 20-001	7.53 ± 0.57 µg/mL Purity > 95%	3.50 µg in 0.5 mL	Liquid. In methanol with TFA 0.05% (v/v). Not certified

Sigma Aldrich				
Web page: http://www.sigmaaldrich.com				
Name	Sales Name	Concentration	Amount	Comments
Pinnatoxin E solution	80694	20 µg/g	0.5 mL	20 µg/g (in 0.1% acetic acid in 50% acetonitrile; nominal concentration)
Pinnatoxin F solution	40538	20 µg/g	0.5 mL	20 µg/g (in 0.1% acetic acid in 50% acetonitrile; nominal concentration)
Pinnatoxin G solution	40821	20 µg/g	0.5 mL	20 µg/g (in 0.1% acetic acid in 50% acetonitrile; nominal concentration)
Gymnodimine solution	80779	20 µg/g	0.5 mL	20 µg/g (in 35 µmol/l AcOH in methanol; nominal concentration)