

Analytical information

Name: Quality Controlled Standard of 20-methyl Spirolide G

Code: 00-SPX20G

Batch: 23-001

General description:

Product Specification	
MOLECULAR FORMULA:	C ₄₃ H ₆₃ NO ₇
MOLECULAR WEIGHT:	705.977
MONOISOTOPIC MW	705.468
CAS NUMBER:	849215-95-8
SOURCE / HOST	<i>Alexandrium ostenfeldii</i>
CONCENTRATION:	(6.67 ± 0.16) µg / mL [†]
PURITY:	≥ 99 % [‡]
FORMULATION:	Liquid. In methanol with TFA 0.05% (v/v)
SHIPPING:	SHIPPED ON ICE
LONG TERM STORAGE:	-20 °C
HAZARD:	See MSDS.

[†] 23-001 batch concentration of 20-methyl Spirolide G was settled by ¹H-qNMR.

[‡] 20-methyl Spirolide G was purified via preparative HPLC-MS/MS from batch cultures of the dinoflagellate *Alexandrium ostenfeldii*. UPLC-MS/MS were used to quantify and check congener impurities. Traces of minor analogues are detected. 0.3% of isobaric analogue of 20-methyl Spirolide G and 0.4% of tentative Spirolide D. These isomers could not be perfectly resolved by qNMR technique, therefore certified concentration is the sum of compounds present in solution.

Instructions for proper handling use: This material contains toxic material, and should be handled with care. Read MSDS before using. Material Safety Data sheet for information regarding 00-SPX20G is enclosed in the package. Use proper disposal methods.

Before opening an ampoule, it must be guaranteed that the content is a liquid and properly mixed to ensure homogeneity. Sample aliquots for analysis should be withdrawn at 15°C to 25°C immediately after opening the vials and should be processed without delay for the concentration value to be valid within the stated uncertainty. Ampoule should not remain open longer than five minutes due to solvent volatility and air contamination.

Instructions for appropriate conditions of storage: The original vial should be stored at temperatures below/at -20 °C (freezer) until use. Unopened ampoules should be stored upright under normal laboratory conditions inside the original container supplied.

Property values:

Date of analysis:	October 26 th 2023
Concentration of 20-methyl Spirolide G	(6.67 ± 0.16) µg / mL

Estimated uncertainty corresponds to a level of confidence in terms of one standard deviation.

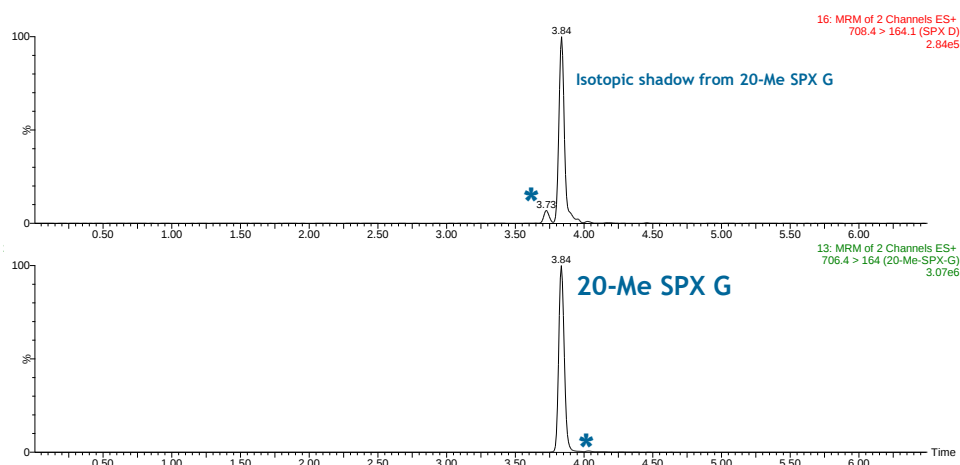


Figure 1. Analysis of the 20-methyl Spirolide G by UPLC-MS/MS. Conditions: ACQUITY UPLC BEH C18 1.7 μ m, 100x2.1 mm, UPLC column. Elution conditions, gradient mode with mobile phases: (A) Water and (B) Aqueous 95% acetonitrile, both with 2mM ammonium formate and 50mM formic acid; Gradient: 0 min 10% B; 4.5 min 65% B; 5.5 min 65% B; 5.6 min 10% B; 6.5 min 10% B; flow rate: 0.4 mL/min. Temperature: 30°C. MS detector: Waters XEVO TQ MS using the typical MRM transitions of spirolide toxin group found in the bibliography. Detected impurities are highlighted.

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RM PRODUCER'S APPROVING OFFICER:

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This Analytical Information is only valid if the product was obtained directly from Laboratorio CIFGA S.A. or one of our authorized distributors.

Certificate Revision History:

November, 16th 2023. Original certificate issue date (certificate rev. 1).

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