

## CERTIFICATE OF ANALYSIS

For Research Use Only

### REFERENCE MATERIAL NAME

Resiniferatoxin

CAT. NUMBER

CFW-AN125100U

LOT NUMBER

A-125100-NU4

CERTIFIED DATE

29 Aug. 2022

RETEST DATE

Aug. 2026

CAS NUMBER

57444-62-9

MOL. FORMULA

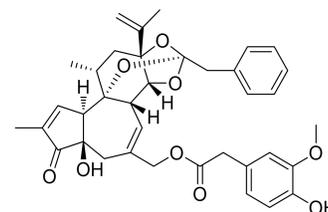
C<sub>37</sub>H<sub>40</sub>O<sub>9</sub>

MOL. WEIGHT

628.72

FORMAT/APPEARANCE

Neat/White Solid



### CHEMICAL PURITY (HPLC)

96.74%

### UNCERTAINTY (U)

2.0%

### STORAGE CONDITION

- 20°C & In a dry and dark place

### SHIPPING CONDITION

Blue Ice

### Batch Information

Solubility: DMSO to 100 mM; Ethanol to 50 mM.

This product is supplied in a sealed glass Vial as a lyophilized solid. Lyophilized solids can be hard to visualize therefore solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

### Uncertainty

The uncertainty values are determined in accordance with ISO 17034 with an 95% confidence level (k=2). Uncertainty is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies.

### Metrological Traceability

Traceable to the SI through an unbroken chain of comparisons.

### Homogeneity Assessment

Homogeneity of the finished product is assessed by analyzing sample batches or by other method consistent with the intended use of the product and by procedures that comply with the appropriate Quality System requirements.

### Certified By

Neil Beare, PhD

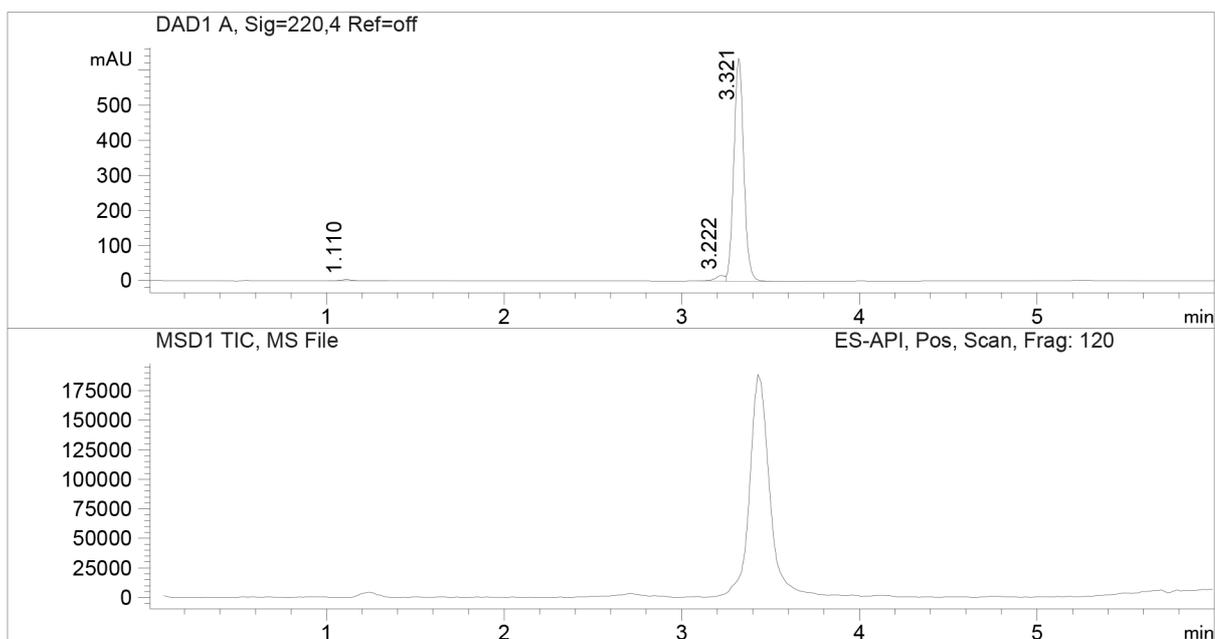
Quality Control Manager



CFW Laboratories, Inc. products are based on ISO 17034, ISO/IEC 17025 and ISO 9001.

HPLC-MS REPORT

Compound ID : Resiniferatoxin  
 Lot ID : A-125100-NU4  
 Injection Date : 29. Aug. 2022  
 Inj. Vol. : 5.0 ul  
 Location : P2-C-03  
 Acq Method : D:\DATA\202208\20220829 2\50-100AB-WASH\_C1.M  
 Data Filename : D:\DATA\202208\20220829 2\A-125100-NU4.D



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 Integration Result  
 =====

Signal 1 : DAD1 A, Sig=220,4 Ref=off

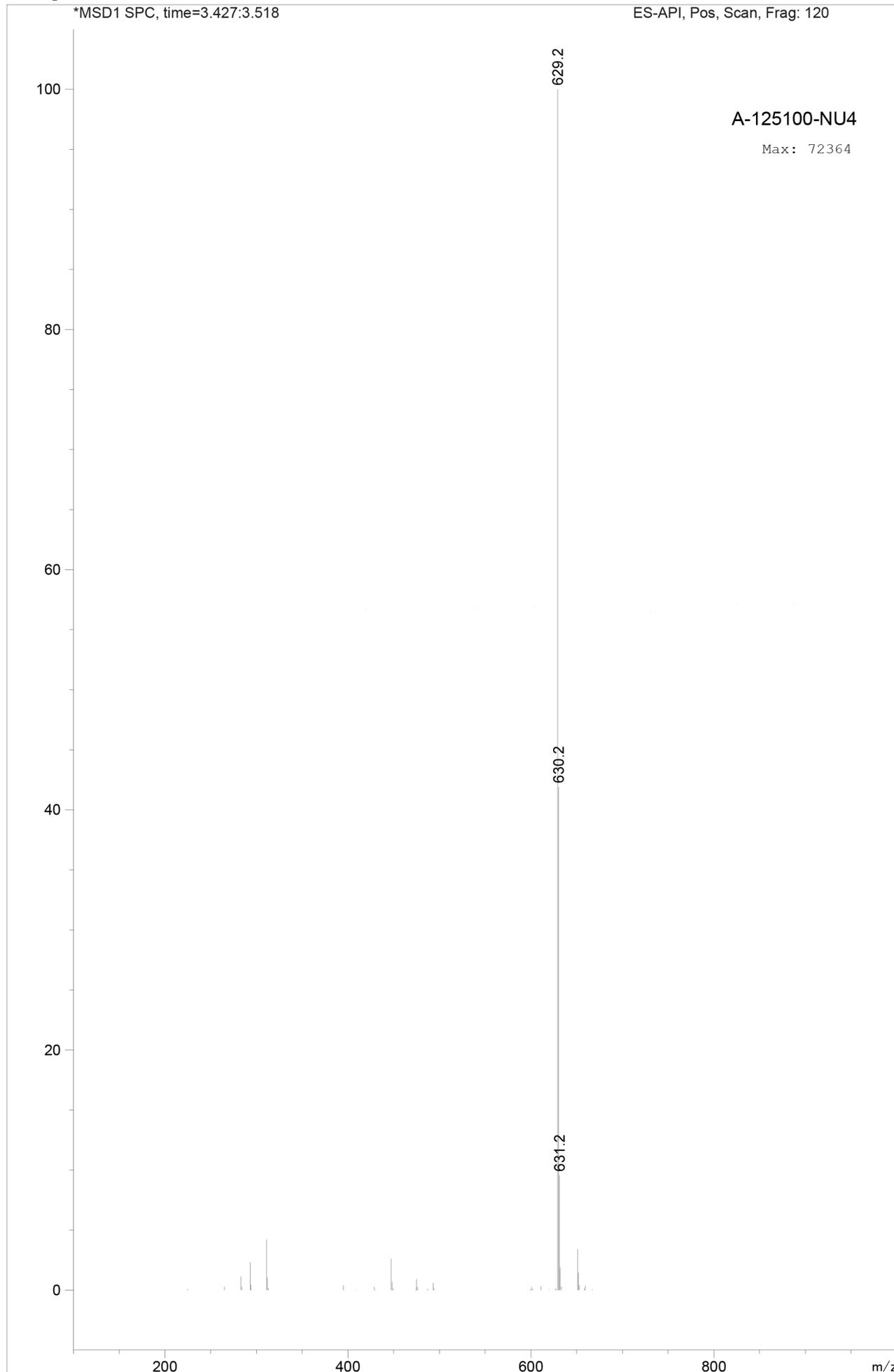
Peak #	RT [min]	Area	Height	Height %	Width [min]	Area %
1	1.110	13.681	2.904	0.441	0.073	0.535
2	3.222	69.660	15.924	2.419	0.073	2.726
3	3.321	2471.826	639.424	97.140	0.064	96.738

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MS Spectrum

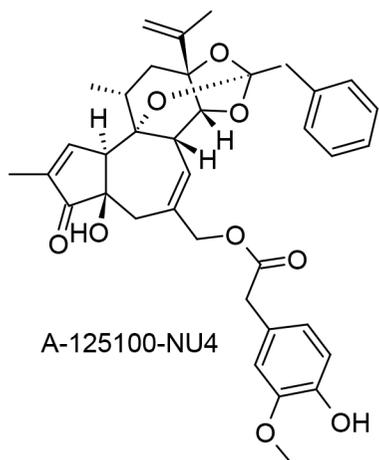
\*MSD1 SPC, time=3.427:3.518

ES-API, Pos, Scan, Frag: 120

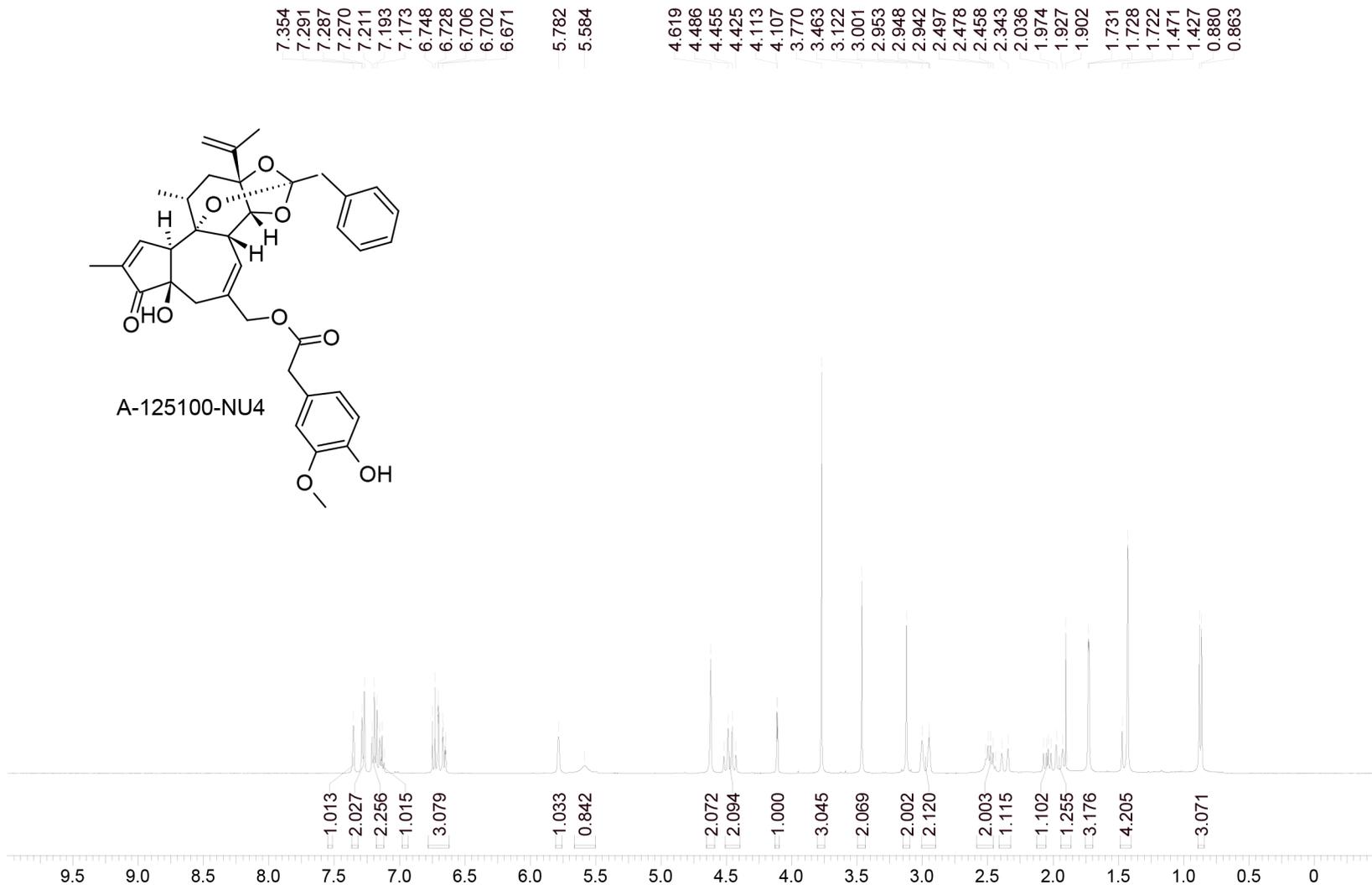


Compound ID: Resiniferatoxin

CDCl3 Bruker\_A\_400MHz



7.354  
7.291  
7.287  
7.270  
7.211  
7.193  
7.173  
6.748  
6.728  
6.706  
6.702  
6.671  
5.782  
5.584  
4.619  
4.486  
4.455  
4.425  
4.113  
4.107  
3.770  
3.463  
3.122  
3.001  
2.953  
2.948  
2.942  
2.497  
2.478  
2.458  
2.343  
2.036  
1.974  
1.927  
1.902  
1.731  
1.728  
1.722  
1.471  
1.427  
0.880  
0.863



Date	17 Aug 2022 10:10:26
Frequency (MHz)	399.9100
Nucleus	1H
Number of Transients	8
Origin	Avance
Original Points Count	16384
Owner	mknmr
Points Count	65536
Pulse Sequence	zg30
Receiver Gain	43.79
SW(cyclical) (Hz)	7812.50
Solvent	CHLORO FORM-d
Spectrum Offset (Hz)	2424.8418
Spectrum Type	standard
Sweep Width (Hz)	7812.38
Temperature (degree C)	25.152