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Certificate of Analysis

ESI-L Low Concentration Tuning Mix

Agilent Part Number: G1969-85000 **Sample Lot Number: CS-3025**

Concentration (weight to volume) and Purity/Grades:

Neat Material	CAS #	Gravimetric Conc.	Purity
Betaine	107-43-7	<0.01%	99.3%
Trifluoroacetic acid ammonium salt	3336-58-1	<0.01%	100%
Hexamethoxyphosphazine	957-13-1	<0.01%	99.0%
Hexakis(2,2-difluoroethoxy)phosphazine	186817-57-2	<0.01%	99.0%
Hexakis(1H, 1H, 3H-tetrafluoropropoxy)phosphazine	58943-98-9	<0.01%	99.0%
Hexakis(1H, 1H, 5H-octafluoropentoxy)phosphazine	16059-16-8	<0.01%	97.0%
Hexakis(1H, 1H, 7H-dodecafluoroheptoxy)phosphazine	3830-74-8	<0.01%	99.0%
Hexakis(1H, 1H, 9H-perfluorononyloxy)phosphazine	186043-67-4	<0.01%	99.0%
Hexakis(1H, 1H ,4H-hexafluorobutyloxy)phosphazine	186406-47-3	<0.01%	97.0%
Hexakis(1H, 1H, 6H-decafluorohexyloxy)phosphazine	186406-48-4	<0.01%	97.0%
Hexakis(1H, 1H, 8H-tetradecafluorooctyloxy)phosphazine	186406-49-5	<0.01%	98.0%
Tris(trifluoromethyl)-1, 3, 5-triazine	368-66-1	<0.01%	99.8%
Tris(heptafluoropropyl)-1, 3, 5-triazine	915-76-4	<0.01%	99.8%
Solvent: Acetonitrile (HPLC Grade)	75-05-8	95.0%	99.9%
DI Water	7732-18-5	5.0%	De-ionized

Storage Condition: Store Refrigerated (2° to 8° C)

Traceability:

This standard has been produced gravimetrically using ISO9001 quality procedures. NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, uncertainty based upon balance and Class A volumetric glassware. API-Mass spectrometry was used to evaluate this multi-standard solution.

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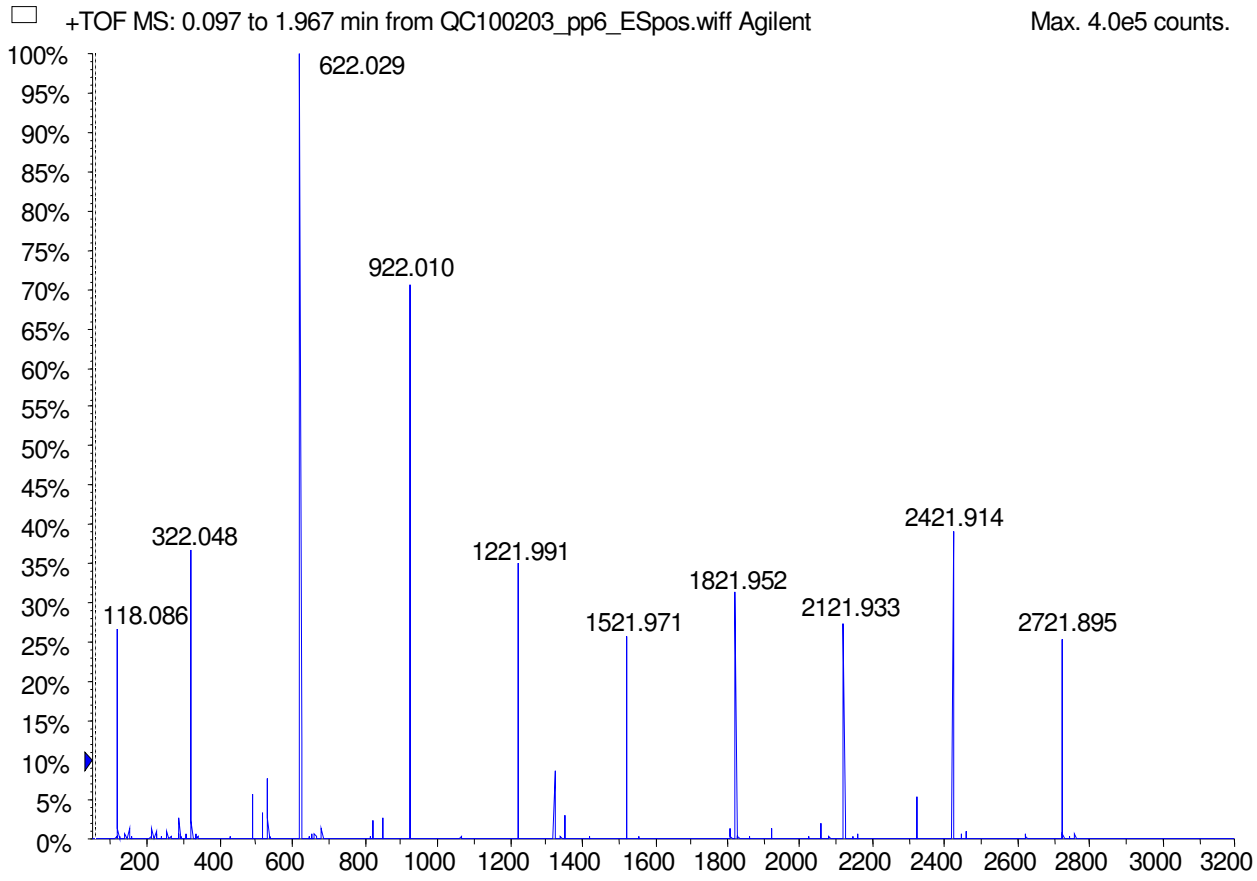
G1969-85000 POS ES-TOF SPECTRA



Sample: G1969-85000
Instrument: Agilent G1969A API-TOF MS
Mode:ES
Polarity: Positive ion mode
CDS infusion rate: 0.1 ml/min
Vcap: -4 kV
Fragmentor: 215 V
Nebulizer pressure : 20 psig
Drying gas flow : 6 L/min
Drying gas temperature : 300 °C
MCP : 650 V
PMT : 703 V
Scan range: m/z 50-3200
Transients : 10,000
Flight tube: -6.5 kV
Oct. RF : 250 V pk

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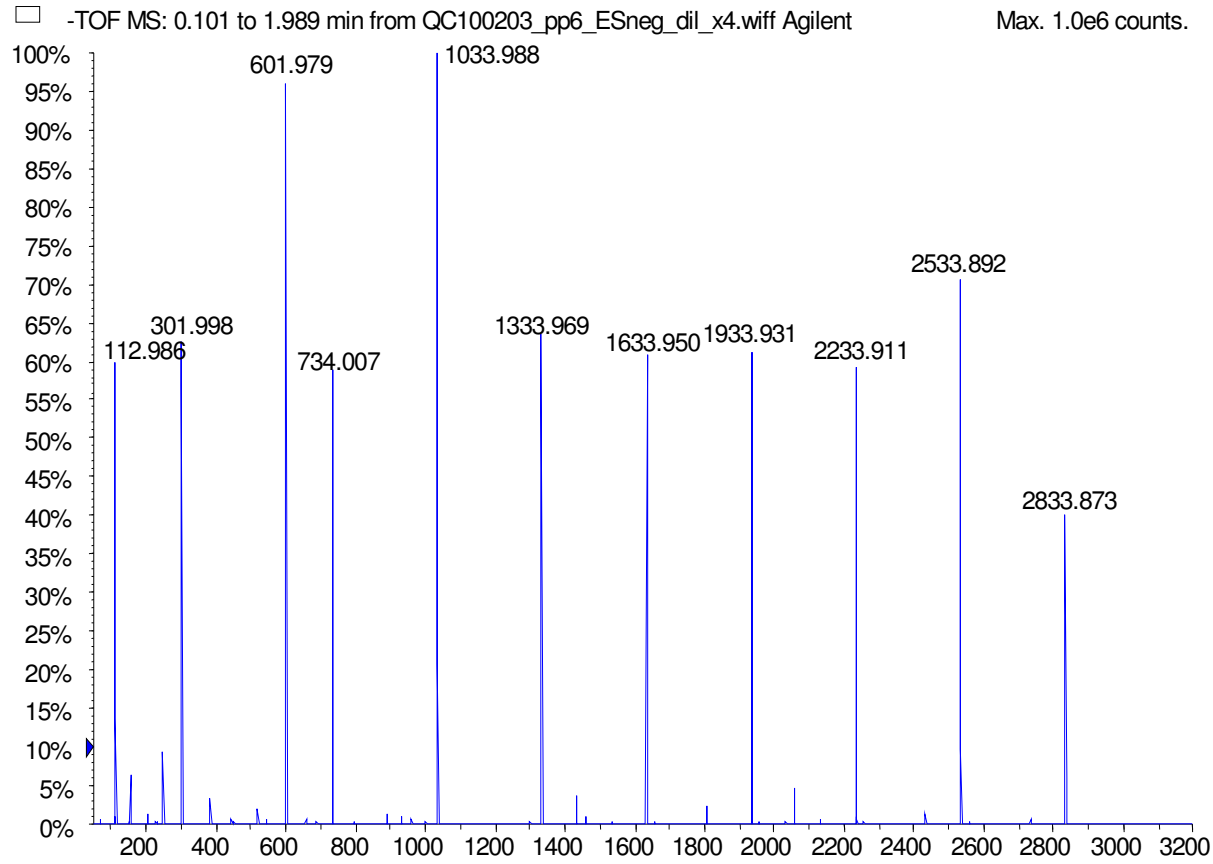
G1969-85000 NEG ES-TOF SPECTRA



Sample: G1969-85000 (1:4 dilution in 95:5 ACN/H2O)
Instrument: Agilent G1969A API-TOF MS
Mode:ES
Polarity: Negative ion mode
CDS infusion rate: 0.1 ml/min
Vcap: +4 kV
Fragmentor: 160 V
Nebulizer pressure : 20 psig
Drying gas flow : 6 L/min
Drying gas temperature : 300 °C
MCP : 650 V
PMT : 703 V
Scan range: m/z 50-3200
Transients : 10,000
Flight tube: +6.5 kV
Oct. RF : 250 V pk

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PRINCIPAL IONS

MASS	POS	NEG
1	118.086255	112.985587
2	322.048121	301.998139
3	622.028960	601.978977
4	922.009798	1033.988109
5	1221.990637	1333.968947
6	1521.971475	1633.949786
7	1821.952313	1933.930624
8	2121.933152	2233.911463
9	2421.913990	2533.892301
10	2721.894829	2833.873139

Date of Release: 01 June 2018

Date of Expiration: 30 June 2020

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