

Acquisition Method Info

Method Name Joan_silvia_MRM_HILIC_01102019_5ul.m

Method Path D:\MassHunter\Methods\Joan_silvia_MRM_HILIC_01102019_5ul.m

Method Description Veure volulm i dilució de la mostra

Device List

- HiP Sampler
- Binary Pump
- Column Comp.
- QQQ

MS QQQ Mass Spectrometer

Ion Source AJS ESI Tune File D:\MassHunter\Tune\QQQ\G6490A\atunes.TUNE.XML

Stop Mode No Limit/As Pump Stop Time (min) 1

Time Filter On Time Filter Width (min) 0.07

Time Segments

| Index | Start Time (min) | Scan Type | Ion Mode | Div Valve | Delta EMV | Store |
|-------|------------------|-----------|------------------------|-----------|-----------|-------|
| 1 | 0 | MRM | ESI+Agilent Jet Stream | To Waste | 300 | Yes |
| 2 | 0.35 | MRM | ESI+Agilent Jet Stream | To MS | 300 | Yes |
| 3 | 6 | MRM | ESI+Agilent Jet Stream | To MS | 300 | Yes |

Time Segment 1

Scan Segments

| Cpd Name | ISTD? | Prec Ion | MS1 Res | Prod Ion | MS2 Res | Dwell | Frag (V) | CE (V) | Cell Acc (V) | Polarity |
|------------|-------|----------|--------------------|----------|--------------------|-------|----------|--------|--------------|----------|
| Compound 1 | No | 350 | Wide / Unit (6490) | 200 | Wide / Unit (6490) | 10 | 380 | 0 | 5 | Positive |

Scan Parameters

Data Stg Centroid Threshold 0

Source Parameters

| Parameter | Value (+) | Value (-) |
|------------------|-----------|-----------|
| Gas Temp (°C) | 270 | 270 |
| Gas Flow (l/min) | 15 | 15 |
| Nebulizer (psi) | 35 | 35 |
| SheathGasHeater | 400 | 400 |
| SheathGasFlow | 11 | 11 |
| Capillary (V) | 3000 | 3000 |
| VCharging | 1000 | 1500 |

Ion Funnel Parameters

Pos High Pressure RF 130 Neg High Pressure RF 110

Pos Low Pressure RF 100 Neg Low Pressure RF 60

Time Segment 2

Scan Segments

| Cpd Name | ISTD? | Prec Ion | MS1 Res | Prod Ion | MS2 Res | Dwell | Frag (V) | CE (V) | Cell Acc (V) | Polarity |
|----------------|-------|----------|--------------------|----------|--------------------|-------|----------|--------|--------------|----------|
| NADPH_1 | No | 746 | Wide / Unit (6490) | 729 | Wide / Unit (6490) | 10 | 380 | 15 | 5 | Positive |
| NADPH_2 | No | 746 | Wide / Unit (6490) | 302 | Wide / Unit (6490) | 10 | 380 | 30 | 5 | Positive |
| NADP_2 | No | 744 | Wide / Unit (6490) | 622 | Wide / Unit (6490) | 10 | 380 | 12 | 5 | Positive |
| NADP_1 | No | 744 | Wide / Unit (6490) | 604 | Wide / Unit (6490) | 10 | 380 | 12 | 5 | Positive |
| NADH_2 | No | 666 | Wide / Unit (6490) | 137 | Wide / Unit (6490) | 10 | 380 | 52 | 5 | Positive |
| NADH_1 | No | 666 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 40 | 5 | Positive |
| NAD | No | 664 | Wide / Unit (6490) | 428 | Wide / Unit (6490) | 10 | 380 | 24 | 5 | Positive |
| NAD | No | 664 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 60 | 5 | Positive |
| SAH_3 | No | 385 | Wide / Unit (6490) | 250 | Wide / Unit (6490) | 10 | 380 | 4 | 5 | Positive |
| SAH_2 | No | 385 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 24 | 5 | Positive |
| SAH_1 | No | 385 | Wide / Unit (6490) | 88 | Wide / Unit (6490) | 10 | 380 | 60 | 5 | Positive |
| methionine_2 | No | 150 | Wide / Unit (6490) | 104 | Wide / Unit (6490) | 10 | 380 | 6 | 5 | Positive |
| methionine_1 | No | 150 | Wide / Unit (6490) | 56 | Wide / Unit (6490) | 10 | 380 | 12 | 5 | Positive |
| homocysteine_1 | No | 136 | Wide / Unit (6490) | 90 | Wide / Unit (6490) | 10 | 380 | 8 | 5 | Positive |
| homocysteine_2 | No | 136 | Wide / Unit (6490) | 56 | Wide / Unit (6490) | 10 | 380 | 16 | 5 | Positive |
| alpha_KG_1 | No | 145 | Wide / Unit (6490) | 101 | Wide / Unit (6490) | 10 | 380 | 4 | 5 | Negative |
| alpha_KG_2 | No | 145 | Wide / Unit (6490) | 57 | Wide / Unit (6490) | 10 | 380 | 8 | 5 | Negative |

Scan Parameters

| | |
|----------|-----------|
| Data Stg | Threshold |
| Centroid | 0 |

Source Parameters

| Parameter | Value (+) | Value (-) |
|------------------|-----------|-----------|
| Gas Temp (°C) | 270 | 270 |
| Gas Flow (l/min) | 15 | 15 |
| Nebulizer (psi) | 35 | 35 |
| SheathGasHeater | 400 | 400 |
| SheathGasFlow | 11 | 11 |
| Capillary (V) | 3000 | 3000 |
| VCharging | 1000 | 1500 |

Ion Funnel Parameters

| | | | |
|----------------------|-----|----------------------|-----|
| Pos High Pressure RF | 130 | Neg High Pressure RF | 110 |
| Pos Low Pressure RF | 100 | Neg Low Pressure RF | 60 |

Time Segment 3

Acquisition Method Report



Scan Segments

| Cpd Name | ISTD? | Prec Ion | MS1 Res | Prod Ion | MS2 Res | Dwell | Frag (V) | CE (V) | Cell Acc (V) | Polarity |
|----------------|-------|----------|--------------------|----------|--------------------|-------|----------|--------|--------------|----------|
| Ac_CoA_3 | No | 810 | Wide / Unit (6490) | 428 | Wide / Unit (6490) | 10 | 380 | 25 | 5 | Positive |
| Ac_CoA_1 | No | 810 | Wide / Unit (6490) | 303 | Wide / Unit (6490) | 10 | 380 | 36 | 5 | Positive |
| Ac_CoA_2 | No | 810 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 60 | 5 | Positive |
| NADPH_1 | No | 746 | Wide / Unit (6490) | 729 | Wide / Unit (6490) | 10 | 380 | 15 | 5 | Positive |
| NADPH_2 | No | 746 | Wide / Unit (6490) | 302 | Wide / Unit (6490) | 10 | 380 | 30 | 5 | Positive |
| NADP_2 | No | 744 | Wide / Unit (6490) | 622 | Wide / Unit (6490) | 10 | 380 | 12 | 5 | Positive |
| NADP_1 | No | 744 | Wide / Unit (6490) | 604 | Wide / Unit (6490) | 10 | 380 | 12 | 5 | Positive |
| NADH_2 | No | 666 | Wide / Unit (6490) | 137 | Wide / Unit (6490) | 10 | 380 | 52 | 5 | Positive |
| NADH_1 | No | 666 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 40 | 5 | Positive |
| NAD | No | 664 | Wide / Unit (6490) | 428 | Wide / Unit (6490) | 10 | 380 | 24 | 5 | Positive |
| NAD | No | 664 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 60 | 5 | Positive |
| ATP_1 | No | 508 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 44 | 5 | Positive |
| ATP_2 | No | 508 | Wide / Unit (6490) | 97 | Wide / Unit (6490) | 10 | 380 | 40 | 5 | Positive |
| SAM_3 | No | 399 | Wide / Unit (6490) | 298 | Wide / Unit (6490) | 10 | 380 | 4 | 5 | Positive |
| SAM_1 | No | 399 | Wide / Unit (6490) | 250 | Wide / Unit (6490) | 10 | 380 | 12 | 5 | Positive |
| SAM_2 | No | 399 | Wide / Unit (6490) | 97 | Wide / Unit (6490) | 10 | 380 | 32 | 5 | Positive |
| SAH_3 | No | 385 | Wide / Unit (6490) | 250 | Wide / Unit (6490) | 10 | 380 | 4 | 5 | Positive |
| SAH_2 | No | 385 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 24 | 5 | Positive |
| SAH_1 | No | 385 | Wide / Unit (6490) | 88 | Wide / Unit (6490) | 10 | 380 | 60 | 5 | Positive |
| AMP_1 | No | 348 | Wide / Unit (6490) | 136 | Wide / Unit (6490) | 10 | 380 | 15 | 5 | Positive |
| AMP_2 | No | 348 | Wide / Unit (6490) | 97 | Wide / Unit (6490) | 10 | 380 | 30 | 5 | Positive |
| homocysteine_1 | No | 136 | Wide / Unit (6490) | 90 | Wide / Unit (6490) | 10 | 380 | 8 | 5 | Positive |
| homocysteine_2 | No | 136 | Wide / Unit (6490) | 56 | Wide / Unit (6490) | 10 | 380 | 16 | 5 | Positive |
| isocitrate_1 | No | 191 | Wide / Unit (6490) | 117 | Wide / Unit (6490) | 10 | 380 | 10 | 5 | Negative |
| isocitrate_2 | No | 191 | Wide / Unit (6490) | 73 | Wide / Unit (6490) | 10 | 380 | 20 | 5 | Negative |
| alpha_KG_1 | No | 145 | Wide / Unit (6490) | 101 | Wide / Unit (6490) | 10 | 380 | 4 | 5 | Negative |
| alpha_KG_2 | No | 145 | Wide / Unit (6490) | 57 | Wide / Unit (6490) | 10 | 380 | 8 | 5 | Negative |

Scan Parameters

Data Stg
Centroid

Threshold
0

Source Parameters

| Parameter | Value (+) | Value (-) |
|------------------|-----------|-----------|
| Gas Temp (°C) | 270 | 270 |
| Gas Flow (l/min) | 15 | 15 |
| Nebulizer (psi) | 35 | 35 |
| SheathGasHeater | 400 | 400 |
| SheathGasFlow | 11 | 11 |
| Capillary (V) | 3000 | 3000 |
| VCharging | 1000 | 1500 |

Ion Funnel Parameters

| | | | |
|----------------------|-----|----------------------|-----|
| Pos High Pressure RF | 130 | Neg High Pressure RF | 110 |
| Pos Low Pressure RF | 100 | Neg Low Pressure RF | 60 |

Chromatograms

| Chrom Type | Label | Offset | Y-Range |
|------------|-------|--------|----------|
| TIC | TIC | 0 | 10000000 |

Instrument Curves

Actual

Name: HiP Sampler

Model: G4226A

Auxiliary

| | |
|--------------------------|--------------|
| Draw Speed | 50.0 µL/min |
| Eject Speed | 100.0 µL/min |
| Draw Position Offset | 0.0 mm |
| Wait Time After Drawing | 2.0 s |
| Sample Flush Out Factor | 5.0 |
| Vial/Well bottom sensing | Yes |

Injection

| | |
|------------------|--------------------|
| Injection Mode | Standard injection |
| Injection Volume | 5.00 µL |

High throughput

| | |
|----------------------------------|----|
| Automatic Delay Volume Reduction | No |
| Overlapped Injection | |
| Enable Overlapped Injection | No |

Valve Switching

| | |
|-----------------------|----|
| Valve Movements | 0 |
| Valve Switch Time 1 | |
| Switch Time 1 Enabled | No |
| Valve Switch Time 2 | |
| Switch Time 2 Enabled | No |
| Valve Switch Time 3 | |
| Switch Time 3 Enabled | No |
| Valve Switch Time 4 | |
| Switch Time 4 Enabled | No |

Stop Time

| | |
|---------------|------------------|
| Stoptime Mode | As pump/No limit |
|---------------|------------------|

Post Time

| | |
|---------------|-----|
| Posttime Mode | Off |
|---------------|-----|

Name: Binary Pump

Model: G4220A

| | |
|---------------------|-----------------------------|
| Flow | 0.400 mL/min |
| Use Solvent Types | Yes |
| Stroke Mode | Synchronized |
| Low Pressure Limit | 0.00 bar |
| High Pressure Limit | 900.00 bar |
| Max. Flow Ramp Up | 100.000 mL/min ² |
| Max. Flow Ramp Down | 100.000 mL/min ² |
| Expected Mixer | No check |

Stroke A

| | |
|--------------------------------|-----|
| Automatic Stroke Calculation A | Yes |
|--------------------------------|-----|

Stop Time

| | |
|---------------|-----------|
| Stoptime Mode | Time set |
| Stoptime | 13.00 min |

Post Time

| | |
|---------------|-----|
| Posttime Mode | Off |
|---------------|-----|

Solvent Composition

| | Channel | Ch. 1 Solv. | Name 1 | Ch2 Solv. | Name 2 | Selected | Used | Percent |
|---|---------|---------------------------------|--------|---------------------------------|--------|----------|------|---------|
| 1 | A | 100.0 % Water V.03 | | 100.0 % Water V.03 | | Ch. 1 | Yes | 2.00 % |
| 2 | B | 100.0 % Acetonitrile V.03 | | 100.0 % Acetonitrile V.03 | | Ch. 1 | Yes | 98.00 % |

Timetable

| | Time | A | B | Flow | Pressure |
|---|-----------|---------|---------|--------------|------------|
| 1 | 2.00 min | 2.00 % | 98.00 % | 0.400 mL/min | 900.00 bar |
| 2 | 9.00 min | 60.00 % | 40.00 % | 0.400 mL/min | 900.00 bar |
| 3 | 9.50 min | 2.00 % | 98.00 % | 0.400 mL/min | 900.00 bar |
| 4 | 13.00 min | 2.00 % | 98.00 % | 0.400 mL/min | 900.00 bar |

| | | | |
|---|--------------|--------------------------|--------|
| Name: | Column Comp. | Model: | G1316C |
| Valve Position | | Position 1 (Port 1 -> 2) | |
| Ready when front door open | | Yes | |
| Left Temperature Control | | | |
| Temperature Control Mode | | Temperature Set | |
| Temperature | | 25.0 °C | |
| Enable Analysis Left Temperature | | | |
| Enable Analysis Left Temperature On | | Yes | |
| Enable Analysis Left Temperature Value | | 0.8 °C | |
| Right Temperature Control | | | |
| Right temperature Control Mode | | Temperature Set | |
| Right temperature | | 25.0 °C | |
| Enable Analysis Right Temperature | | | |
| Enable Analysis Right Temperature On | | Yes | |
| Enable Analysis Right Temperature Value | | 0.8 °C | |
| Stop Time | | | |
| Stoptime Mode | | As pump/injector | |
| Post Time | | | |
| Posttime Mode | | Off | |