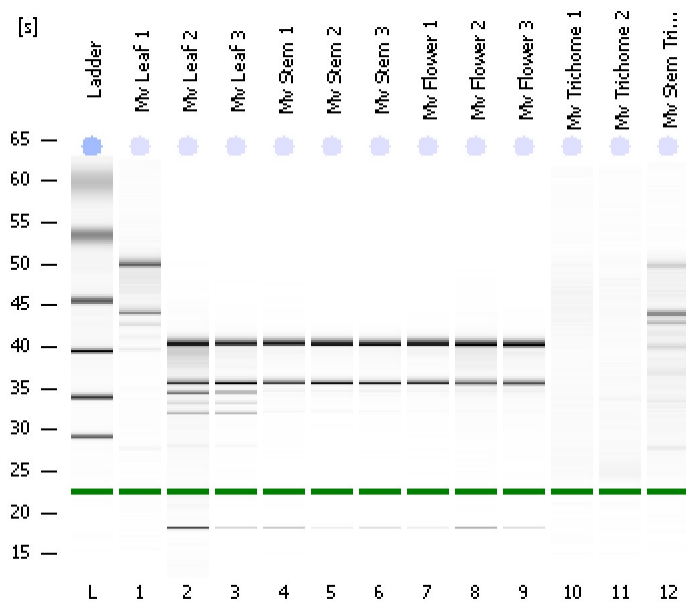


Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

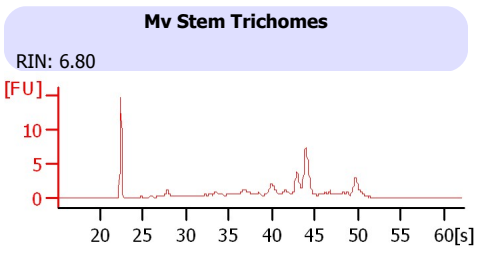
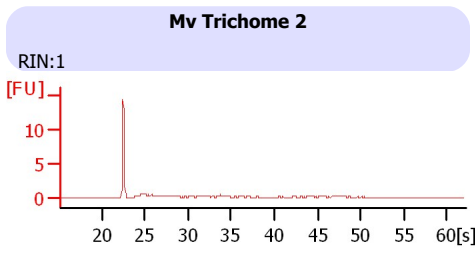
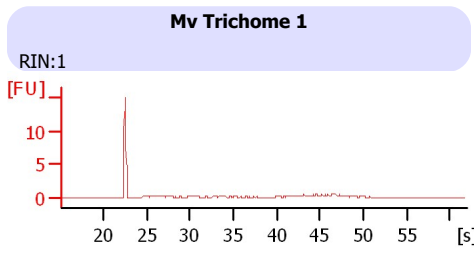
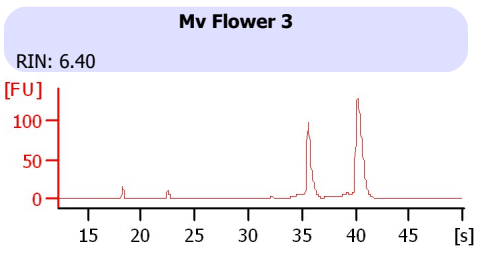
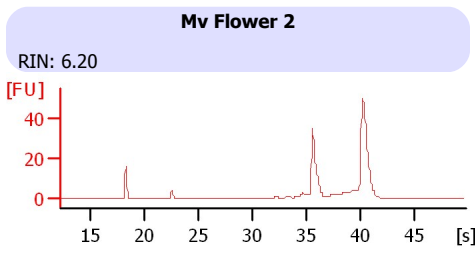
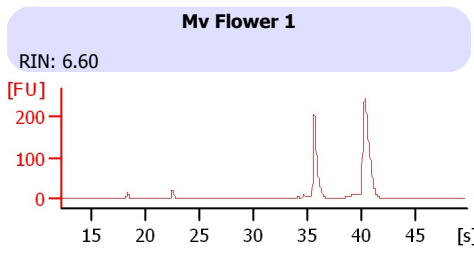
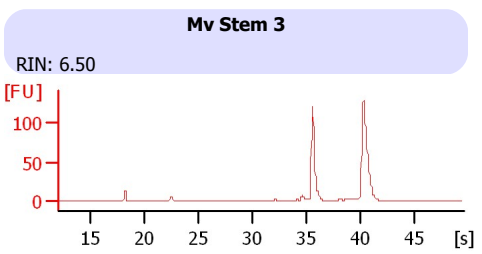
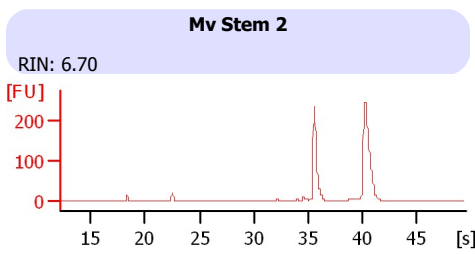
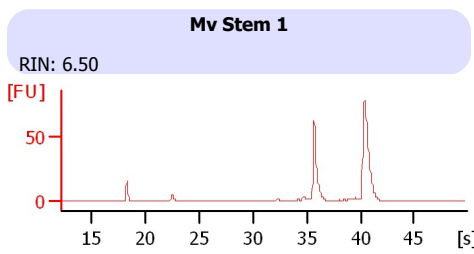
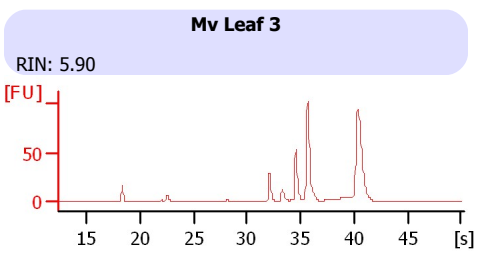
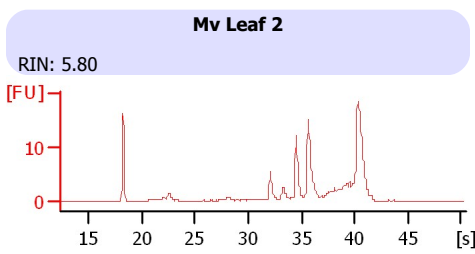
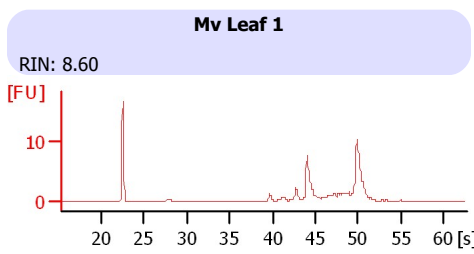
Electrophoresis File Run Summary



Instrument Information:
 Instrument Name: DE13701086 Firmware: C.01.069
 Serial#: DE13701086 Type: G2938B

Assay Information:
 Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Plant RNA Nano.xsy
 Assay Class: Plant RNA Nano
 Version: 1.3
 Assay Comments: Total RNA Analysis ng sensitivity (Plant)
 © Copyright 2003 - 2009 Agilent Technologies, Inc.

Chip Information:
 Chip Lot #:
 Reagent Kit Lot #:
 Chip Comments:



Assay Class: Plant RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
 Modified: 10/6/2015 2:50:22 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------------|----------------|--------|-------------------|--------------|
| Mv Leaf 1 | | ✓ | RIN: 8.60 | |
| Mv Leaf 2 | | ✓ | RIN: 5.80 | |
| Mv Leaf 3 | | ✓ | RIN: 5.90 | |
| Mv Stem 1 | | ✓ | RIN: 6.50 | |
| Mv Stem 2 | | ✓ | RIN: 6.70 | |
| Mv Stem 3 | | ✓ | RIN: 6.50 | |
| Mv Flower 1 | | ✓ | RIN: 6.60 | |
| Mv Flower 2 | | ✓ | RIN: 6.20 | |
| Mv Flower 3 | | ✓ | RIN: 6.40 | |
| Mv Trichome 1 | | ✓ | RIN:1 | |
| Mv Trichome 2 | | ✓ | RIN:1 | |
| Mv Stem Trichomes | | ✓ | RIN: 6.80 | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 13
Minimum Visible Range [s] : 17
Maximum Visible Range [s] : 70
Start Analysis Time Range [s] : 19
End Analysis Time Range [s] : 69
Ladder Concentration [ng/ μ l] : 150
Lower Marker Concentration [ng/ μ l] : 0
Upper Marker Concentration [ng/ μ l] : 0
Used Lower Marker for Quantitation
Standard Curve Fit is Logarithmic
Show Data Aligned to Lower Marker

Integrator Settings

Integration Start Time [s] : 19
Integration End Time [s] : 69
Slope Threshold : 0.6
Height Threshold [FU] : 0.2
Area Threshold : 0.1
Width Threshold [s] : 0.2
Baseline Plateau [s] : 6

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

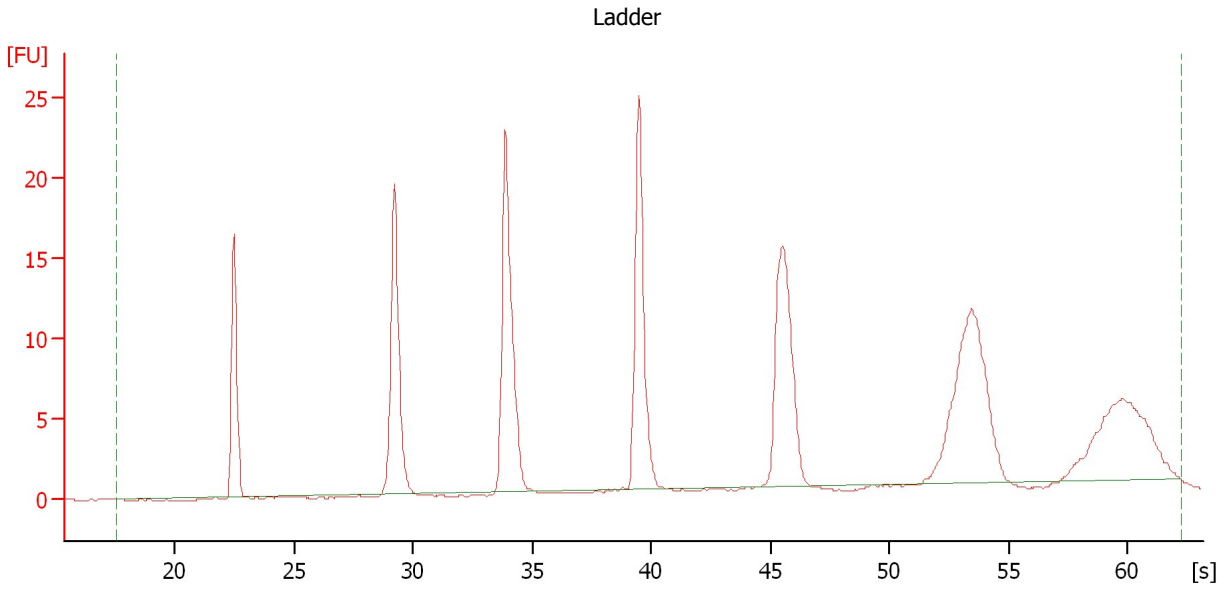
Ladder

| Ladder Peak | Size |
|-------------|------|
| 1 | 25 |
| 2 | 200 |
| 3 | 500 |
| 4 | 1000 |
| 5 | 2000 |
| 6 | 4000 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary



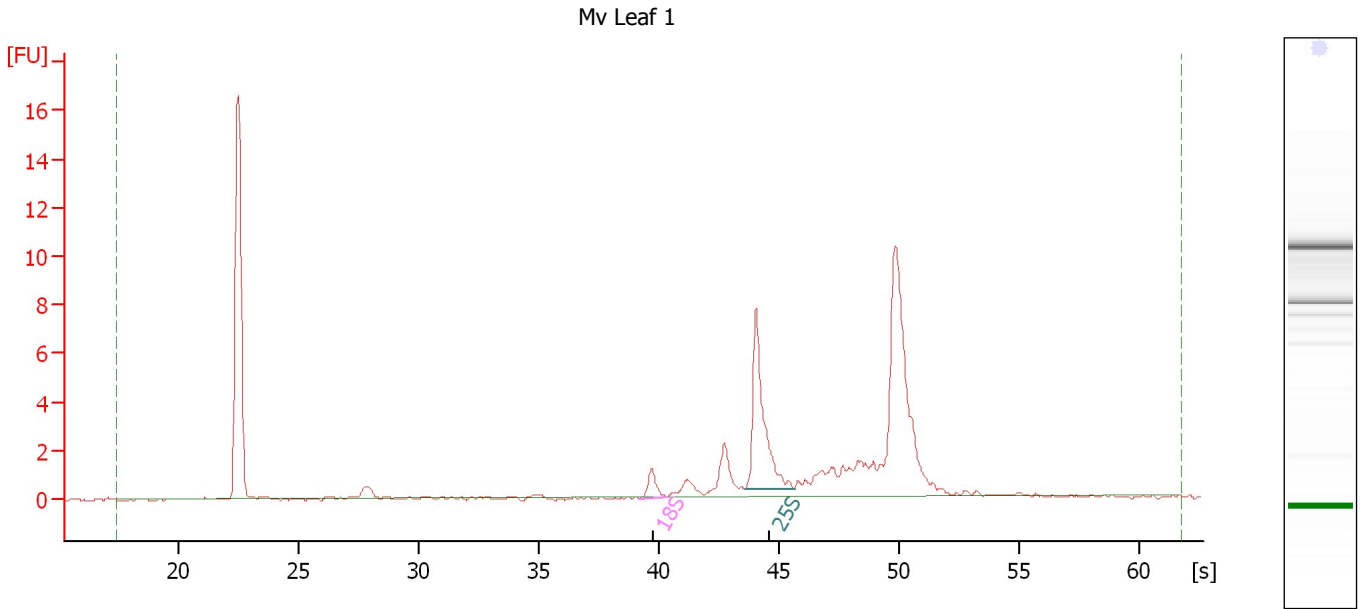
Overall Results for Ladder

| | | | |
|--------------------|-----------------|------------------------|---|
| RNA Area: | 161.3 | Result Flagging Color: | |
| RNA Concentration: | 150 ng/ μ l | Result Flagging Label: | All Other Samples |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Mv Leaf 1

RNA Area: 41.9 RNA Integrity Number (RIN): 8.6 (B.02.08)
RNA Concentration: 39 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 7.4 Result Flagging Label: RIN: 8.60

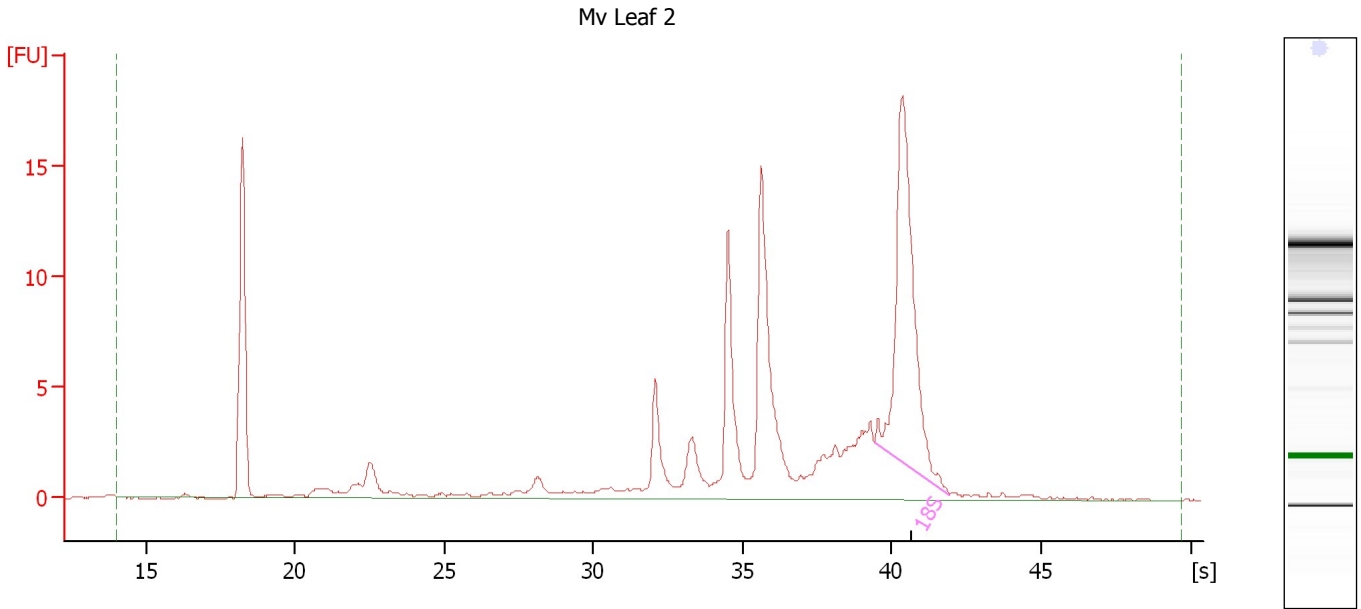
Fragment table for sample 1 : Mv Leaf 1

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|------|-----------------|
| 18S | 39.18 | 40.35 | 1.2 | 2.9 |
| 25S | 43.57 | 45.63 | 8.9 | 21.2 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Mv Leaf 2

RNA Area: 124.0 RNA Integrity Number (RIN): 5.8 (B.02.08)
RNA Concentration: 115 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 0.0 Result Flagging Label: RIN: 5.80

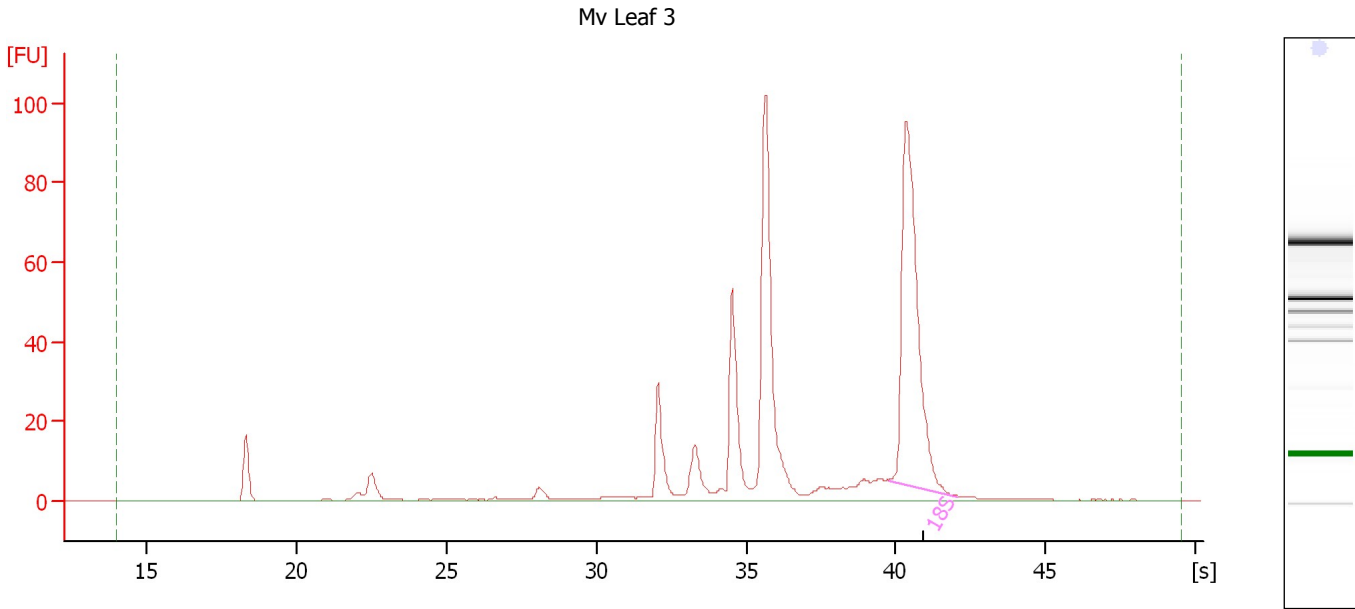
Fragment table for sample 2 : Mv Leaf 2

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|------|-----------------|
| 18S | 39.42 | 41.94 | 27.8 | 22.4 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Mv Leaf 3

RNA Area: 428.8 RNA Integrity Number (RIN): 5.9 (B.02.08)
RNA Concentration: 399 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 0.0 Result Flagging Label: RIN: 5.90

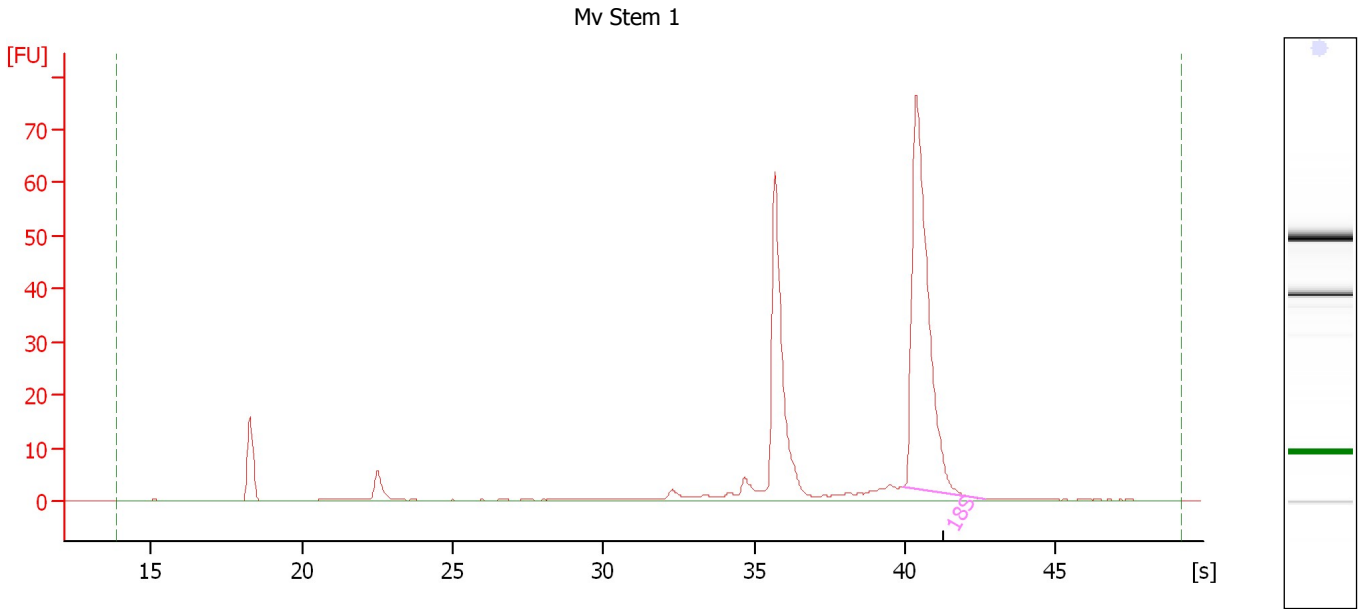
Fragment table for sample 3 : Mv Leaf 3

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|-------|-----------------|
| 18S | 39.76 | 42.06 | 136.5 | 31.8 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Mv Stem 1

RNA Area: 248.0 RNA Integrity Number (RIN): 6.5 (B.02.08)
RNA Concentration: 231 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 0.0 Result Flagging Label: RIN: 6.50

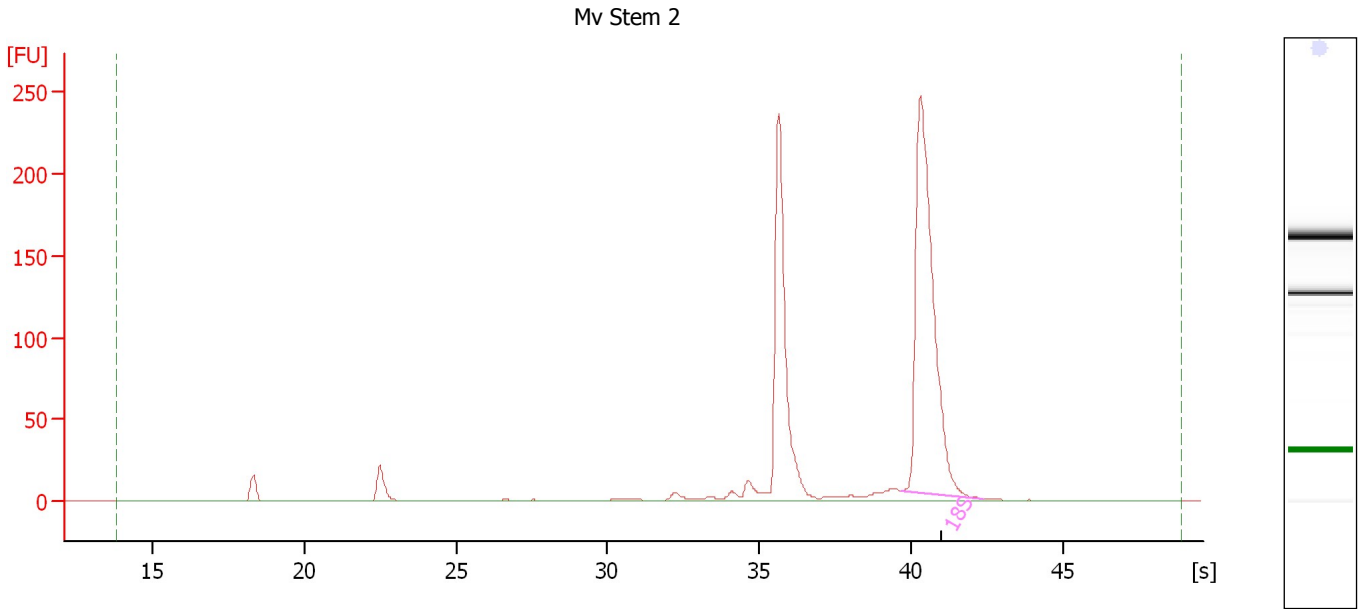
Fragment table for sample 4 : Mv Stem 1

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|-------|-----------------|
| 18S | 39.91 | 42.61 | 110.9 | 44.7 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Mv Stem 2

RNA Area: 775.7 RNA Integrity Number (RIN): 6.7 (B.02.08)
RNA Concentration: 721 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 0.0 Result Flagging Label: RIN: 6.70

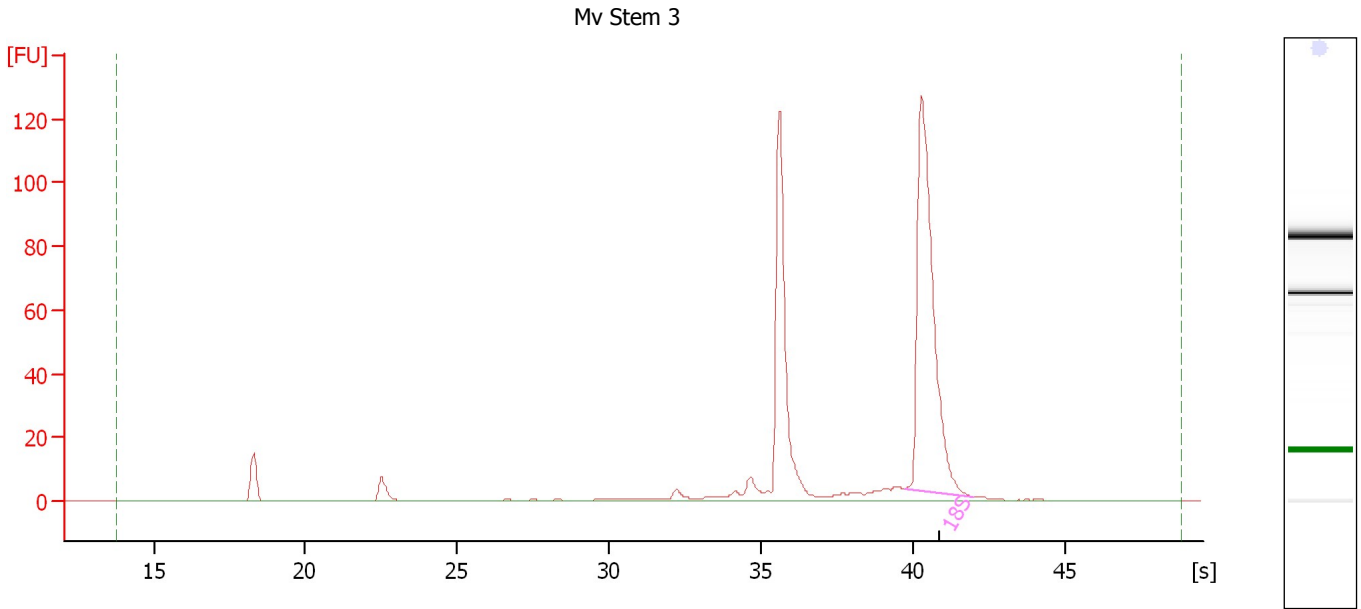
Fragment table for sample 5 : Mv Stem 2

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|-------|-----------------|
| 18S | 39.65 | 42.38 | 394.9 | 50.9 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Mv Stem 3

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 384.4 | RNA Integrity Number (RIN): | 6.5 (B.02.08) |
| RNA Concentration: | 357 ng/μl | Result Flagging Color: | |
| rRNA Ratio [25s / 18s]: | 0.0 | Result Flagging Label: | RIN: 6.50 |

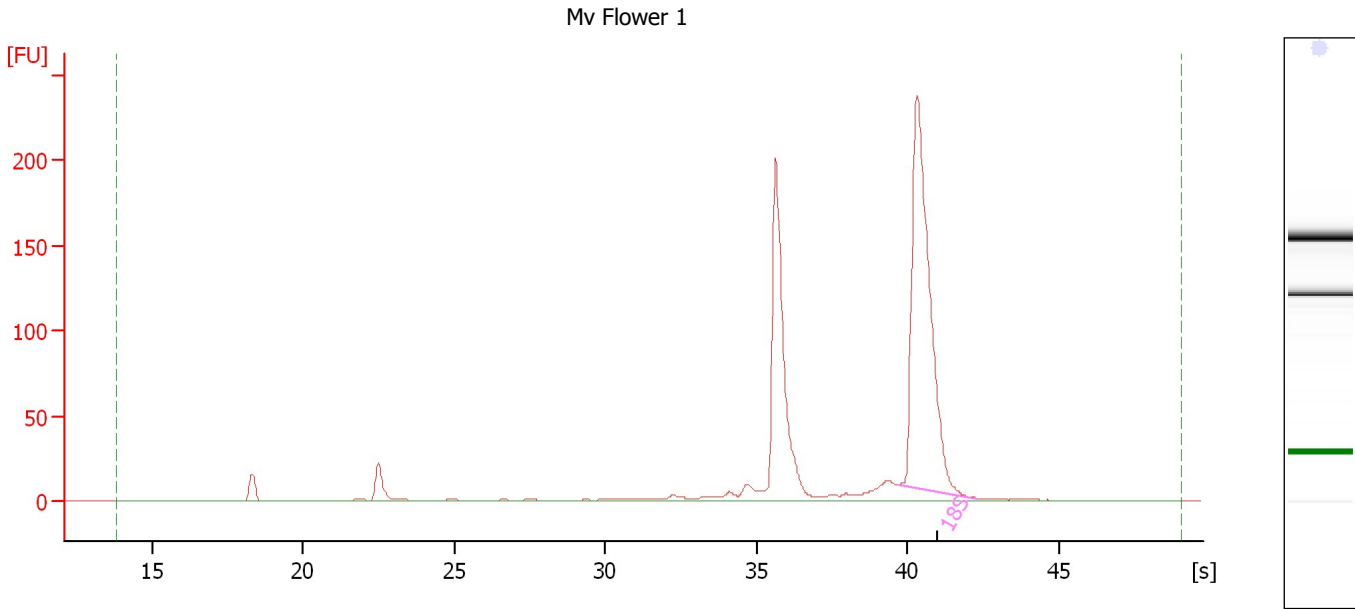
Fragment table for sample 6 : Mv Stem 3

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|-------|-----------------|
| 18S | 39.76 | 41.99 | 182.8 | 47.6 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Mv Flower 1

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 785.1 | RNA Integrity Number (RIN): | 6.6 (B.02.08) |
| RNA Concentration: | 730 ng/μl | Result Flagging Color: | |
| rRNA Ratio [25s / 18s]: | 0.0 | Result Flagging Label: | RIN: 6.60 |

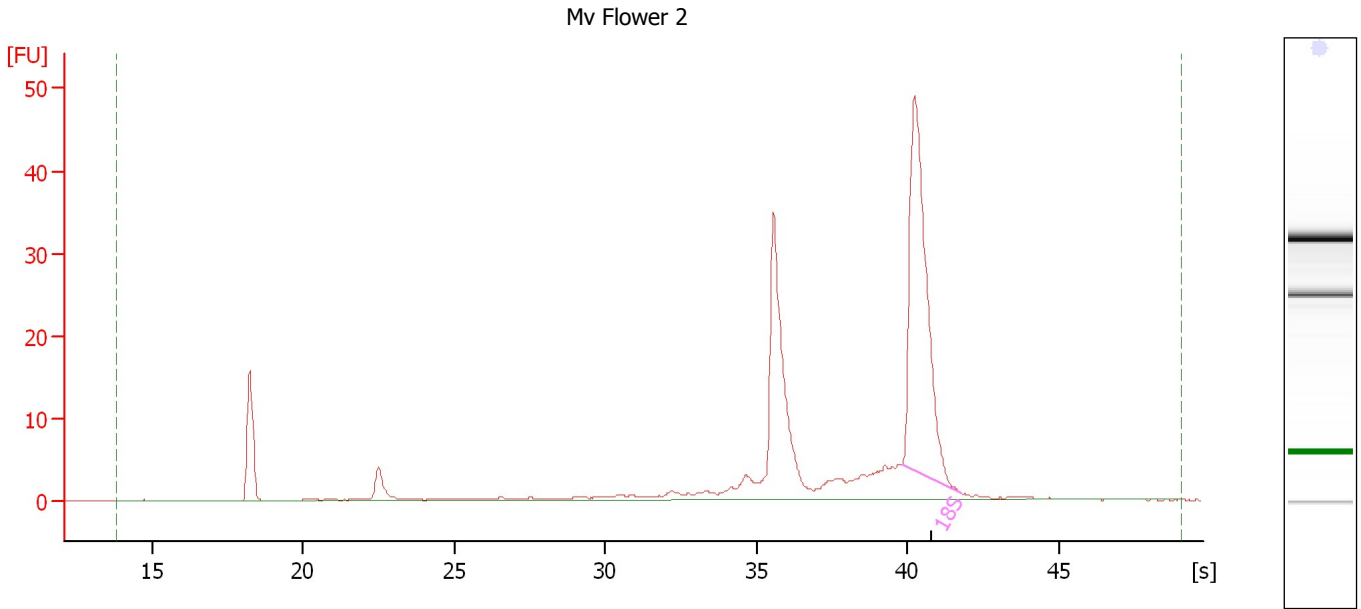
Fragment table for sample 7 : Mv Flower 1

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|-------|-----------------|
| 18S | 39.70 | 42.33 | 379.8 | 48.4 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Mv Flower 2

RNA Area: 199.0 RNA Integrity Number (RIN): 6.2 (B.02.08)
RNA Concentration: 185 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 0.0 Result Flagging Label: RIN: 6.20

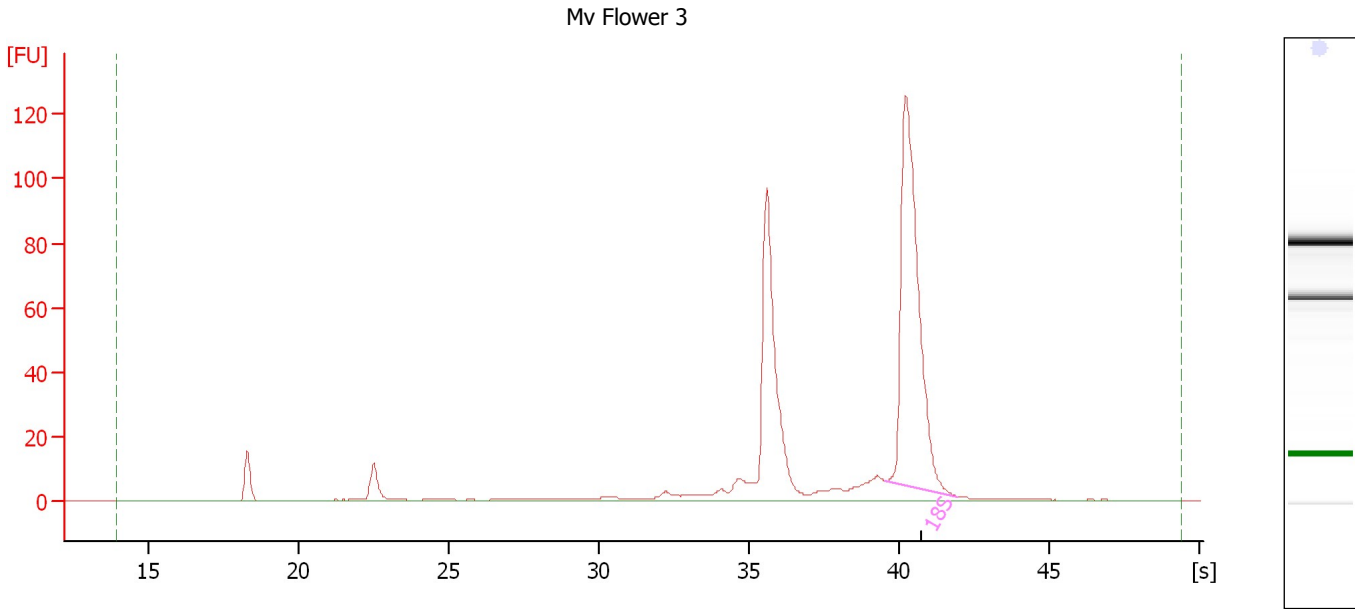
Fragment table for sample 8 : Mv Flower 2

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|------|-----------------|
| 18S | 39.85 | 41.80 | 71.4 | 35.9 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Mv Flower 3

RNA Area: 466.8 RNA Integrity Number (RIN): 6.4 (B.02.08)
RNA Concentration: 434 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 0.0 Result Flagging Label: RIN: 6.40

Fragment table for sample 9 : Mv Flower 3

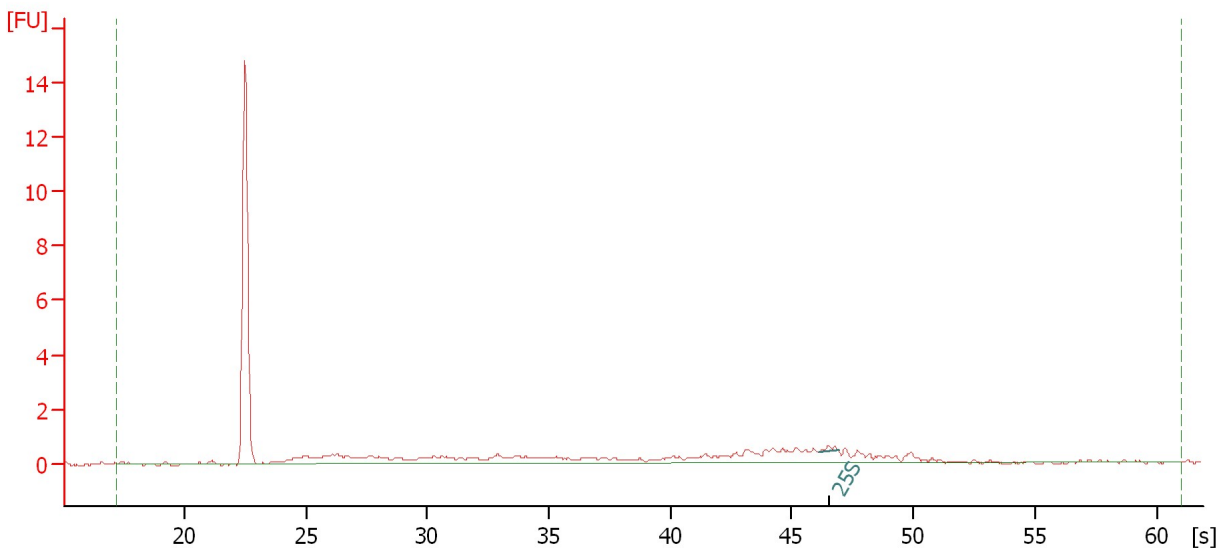
| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|-------|-----------------|
| 18S | 39.53 | 41.92 | 200.2 | 42.9 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...

Mv Trichome 1



Overall Results for sample 10 : Mv Trichome 1

RNA Area: 14.9 RNA Integrity Number (RIN): 1 (B.02.08)
RNA Concentration: 14 ng/μl Result Flagging Color:
rRNA Ratio [25s / 18s]: 0.0 Result Flagging Label: RIN:1

Fragment table for sample 10 : Mv Trichome 1

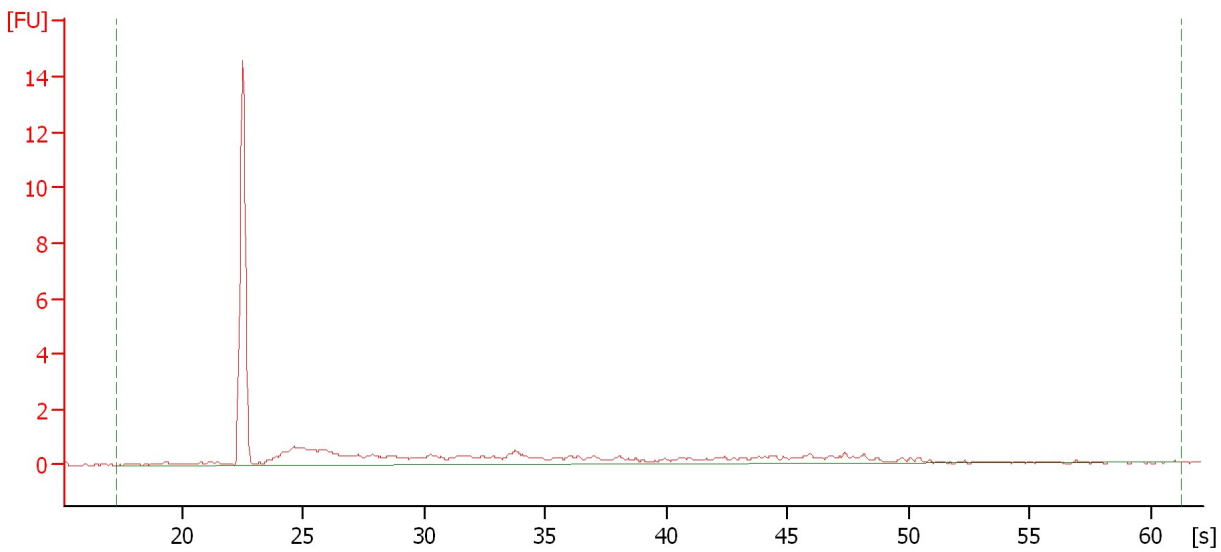
| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|------|-----------------|
| 25S | 46.15 | 46.90 | 0.2 | 1.2 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...

Mv Trichome 2



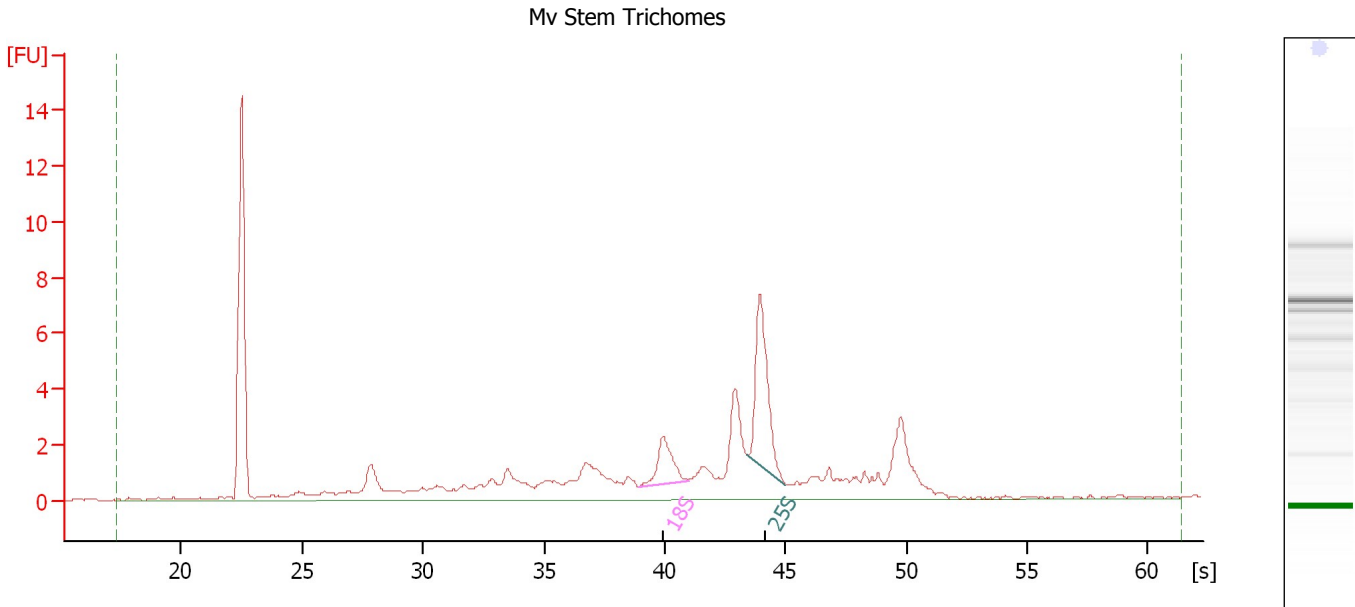
Overall Results for sample 11 : Mv Trichome 2

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 21.6 | RNA Integrity Number (RIN): | 1 (B.02.08) |
| RNA Concentration: | 20 ng/μl | Result Flagging Color: | |
| rRNA Ratio [25s / 18s]: | 0.0 | Result Flagging Label: | RIN:1 |

Assay Class: Plant RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
 Modified: 10/6/2015 2:50:22 PM

Electropherogram Summary Continued ...



Overall Results for sample 12 : Mv Stem Trichomes

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 62.7 | RNA Integrity Number (RIN): | 6.8 (B.02.08) |
| RNA Concentration: | 58 ng/μl | Result Flagging Color: | |
| rRNA Ratio [25s / 18s]: | 2.8 | Result Flagging Label: | RIN: 6.80 |

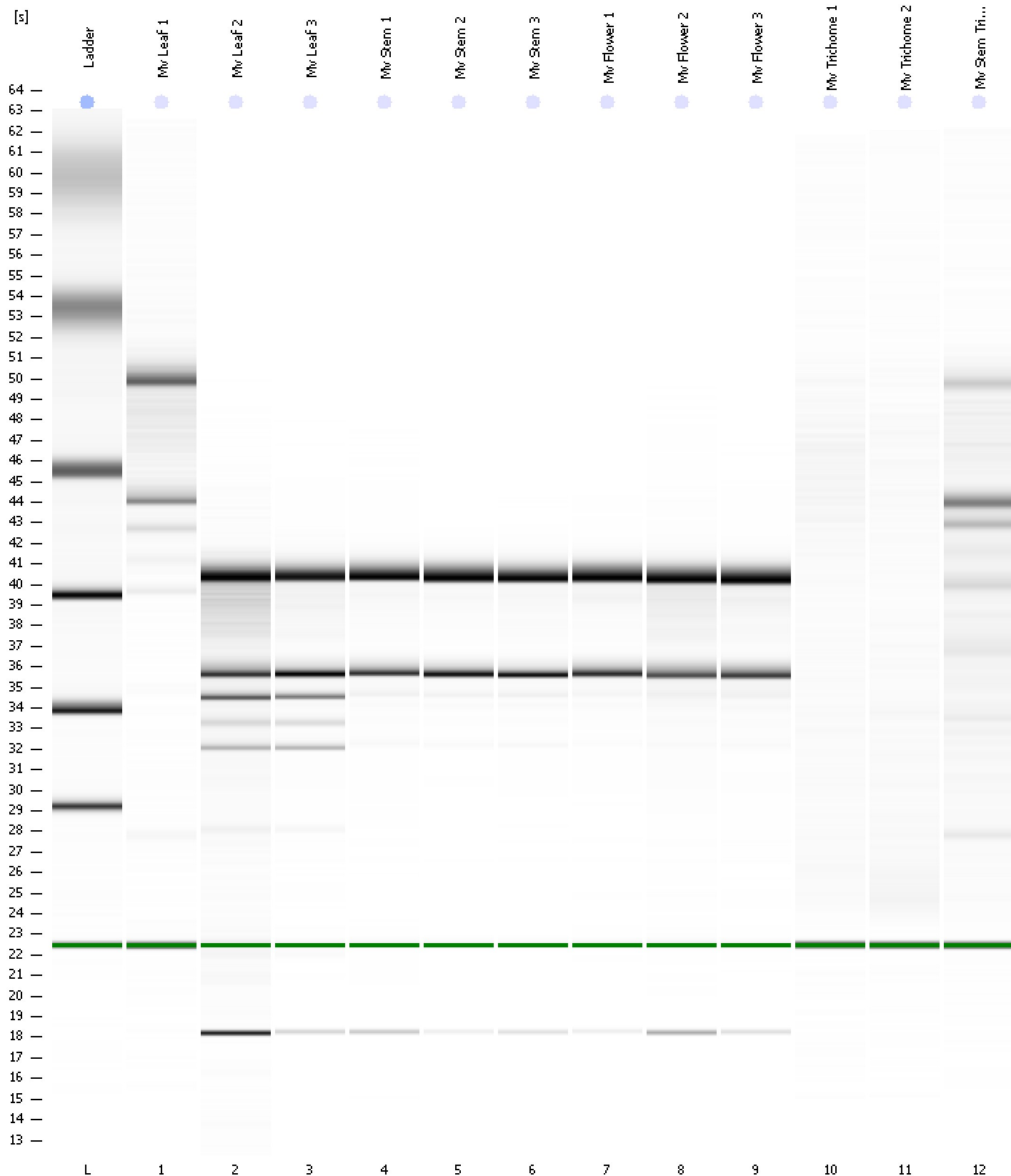
Fragment table for sample 12 : Mv Stem Trichomes

| Name | Start Time [s] | End Time [s] | Area | % of total Area |
|------|----------------|--------------|------|-----------------|
| 18S | 38.91 | 41.00 | 2.9 | 4.6 |
| 25S | 43.44 | 45.00 | 8.0 | 12.7 |

Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Gel Image

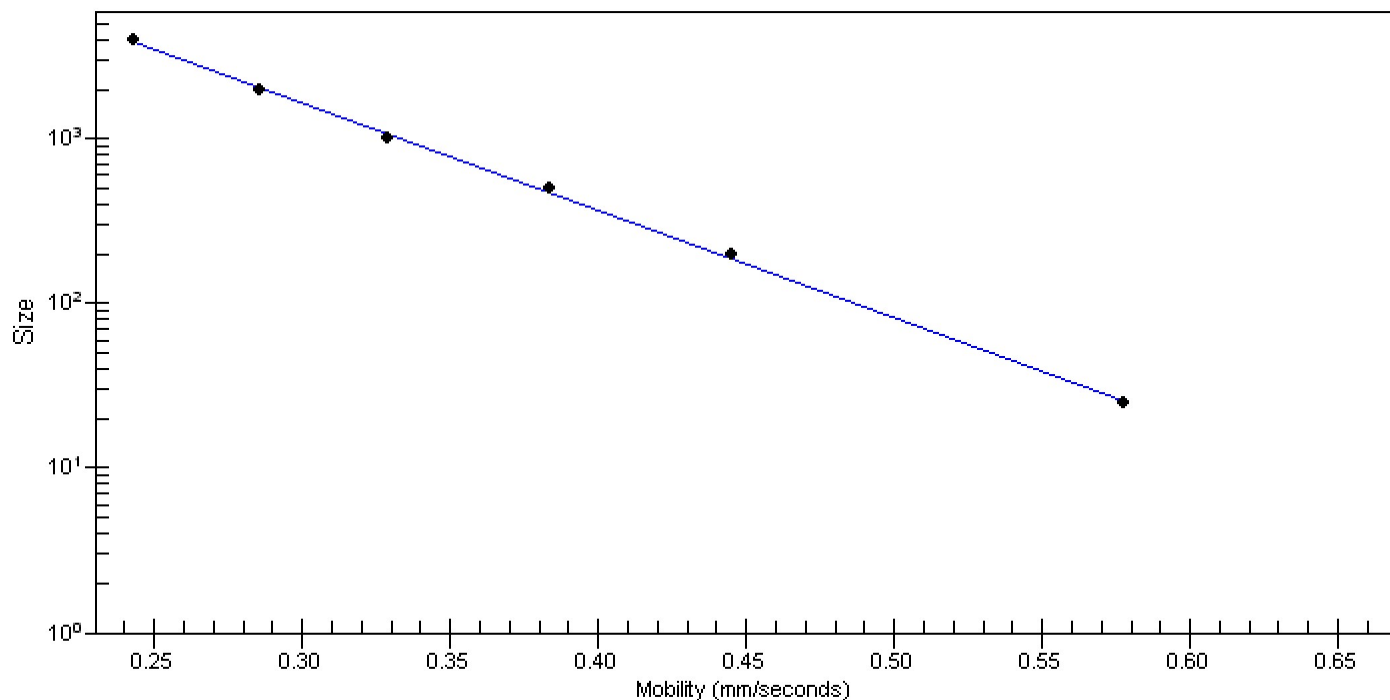


Assay Class: Plant RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
Modified: 10/6/2015 2:50:22 PM

Curves

Standard Curve



Assay Class: Plant RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad

Created: 10/6/2015 2:26:34 PM
 Modified: 10/6/2015 2:50:22 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|---|--------|------------|----------|--------------|----------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 13) | | Instrument | Run | | 10/6/2015 2:50:22 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-10-06\2015-10-06_002.xad) | | Instrument | Run | | 10/6/2015 2:26:39 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 10/6/2015 2:26:39 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 10/6/2015 2:26:39 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 10/6/2015 2:26:39 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 10/6/2015 2:26:39 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 10/6/2015 2:26:39 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 10/6/2015 2:26:39 PM | (GMT --07:00) Pacific Standard Time | UC Davis | D8XSMGH1 |