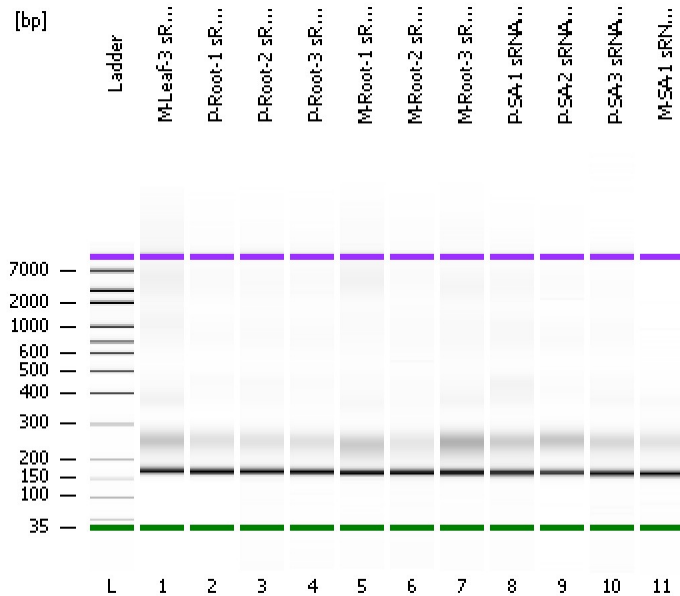


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
Modified: 8/28/2013 12:08:51 PM

Electrophoresis File Run Summary



Instrument Information:

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

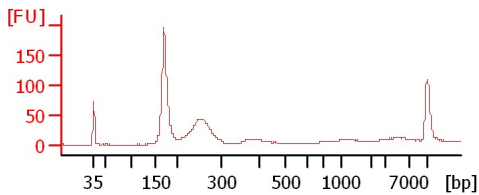
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

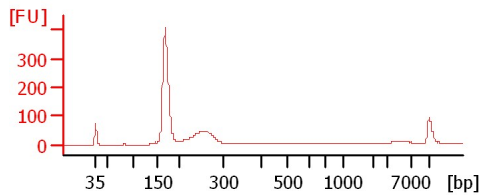
Chip Information:

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

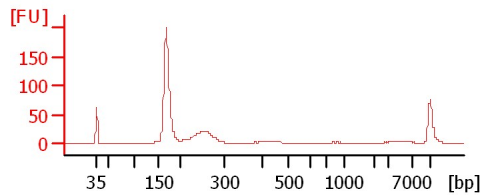
M-Leaf-3 sRNA Lib 1:2



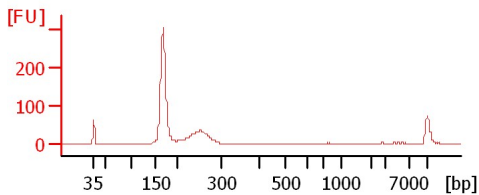
P-Root-1 sRNA Lib 1:2



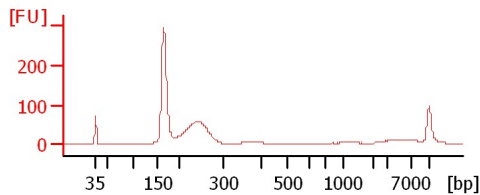
P-Root-2 sRNA Lib 1:2



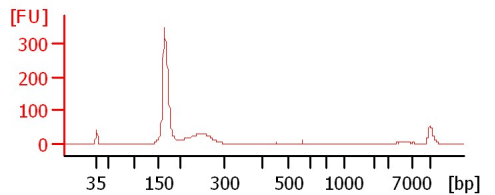
P-Root-3 sRNA Lib 1:2



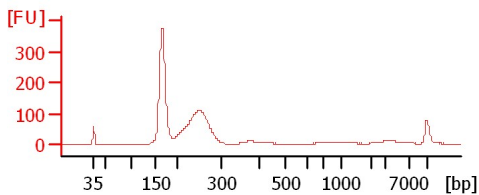
M-Root-1 sRNA Lib 1:2



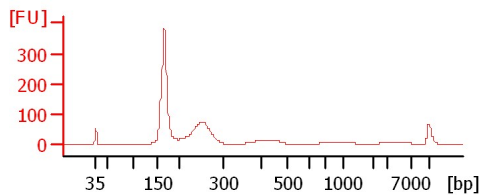
M-Root-2 sRNA Lib



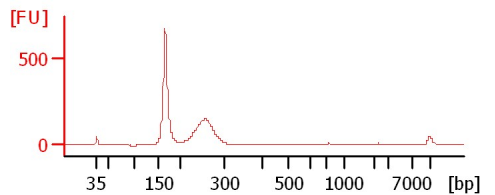
M-Root-3 sRNA Lib



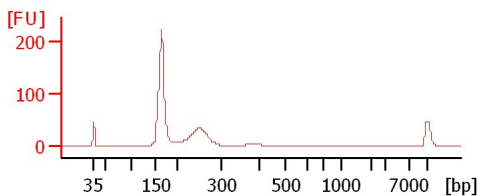
P-SA-1 sRNA Lib



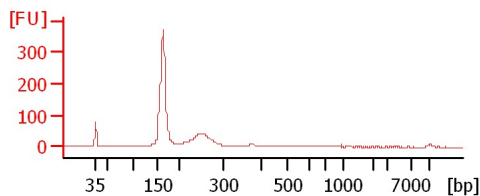
P-SA-2 sRNA Lib 1:2



P-SA-3 sRNA Lib 1:2



M-SA-1 sRNA Lib



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
Modified: 8/28/2013 12:08:51 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
M-Leaf-3 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-Root-1 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-Root-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-Root-3 sRNA Lib 1:2		<input type="checkbox"/>	✓			
M-Root-1 sRNA Lib 1:2		<input type="checkbox"/>	✓			
M-Root-2 sRNA Lib		<input type="checkbox"/>	✓			
M-Root-3 sRNA Lib		<input type="checkbox"/>	✓			
P-SA-1 sRNA Lib		<input type="checkbox"/>	✓			
P-SA-2 sRNA Lib 1:2		<input type="checkbox"/>	✓			
P-SA-3 sRNA Lib 1:2		<input type="checkbox"/>	✓			
M-SA-1 sRNA Lib		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
Modified: 8/28/2013 12:08:51 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

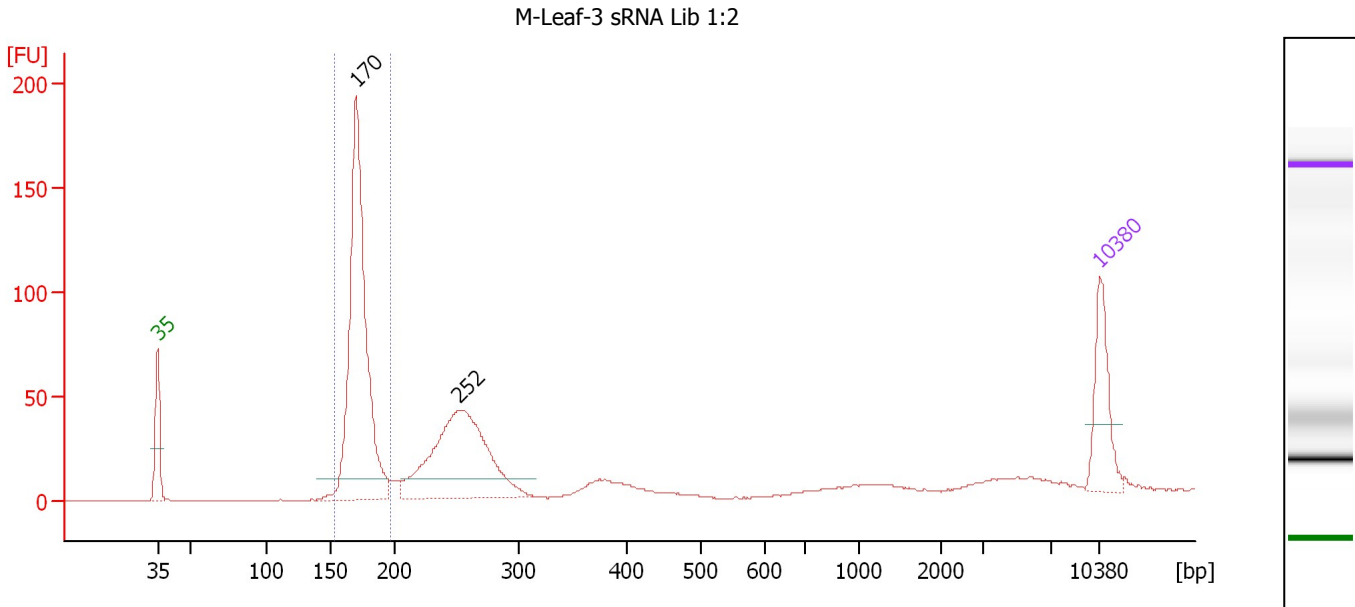
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary



Setpoint Deviations for sample 1 : M-Leaf-3 sRNA Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 1 : M-Leaf-3 sRNA Lib 1:2

Number of peaks found: 2
 Noise: 0.2
 Corr. Area 1: 463.9

Peak table for sample 1 : M-Leaf-3 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	170	601.83	5,364.6	
3	252	376.45	2,264.1	
4	10,380	75.00	10.9	Upper Marker

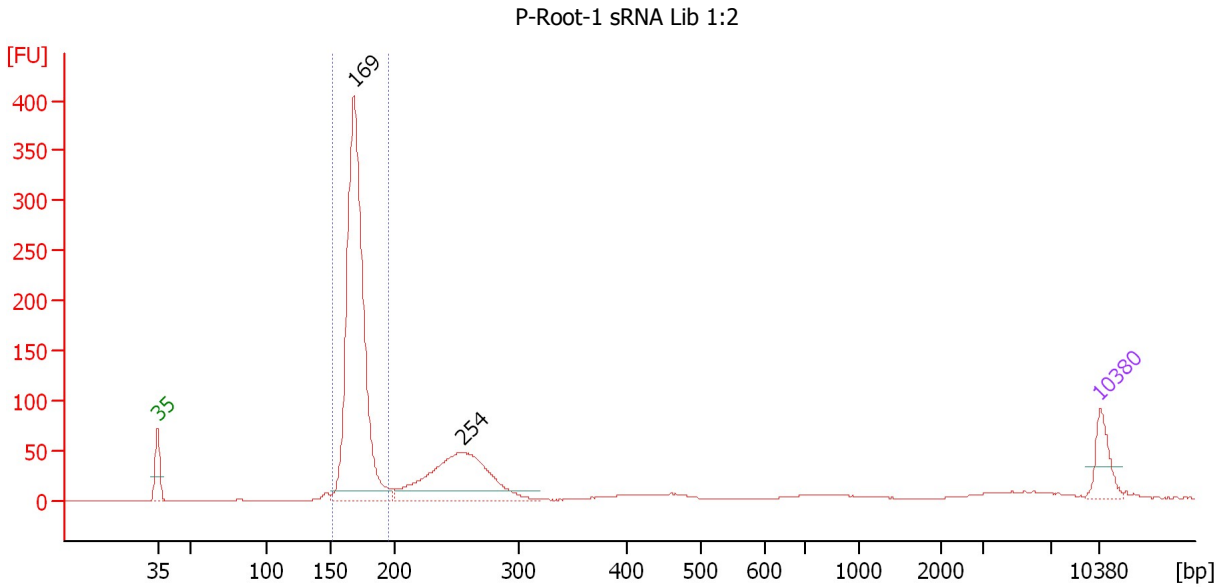
Region table for sample 1 : M-Leaf-3 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
153	197	173	5,214.4	594.03	463.9	43	4.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : P-Root-1 sRNA Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 2 : P-Root-1 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 1,011.5
 Noise: 0.2

Peak table for sample 2 : P-Root-1 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	169	1,555.66	13,980.9	
3	254	540.88	3,224.0	
4	10,380	75.00	10.9	Upper Marker

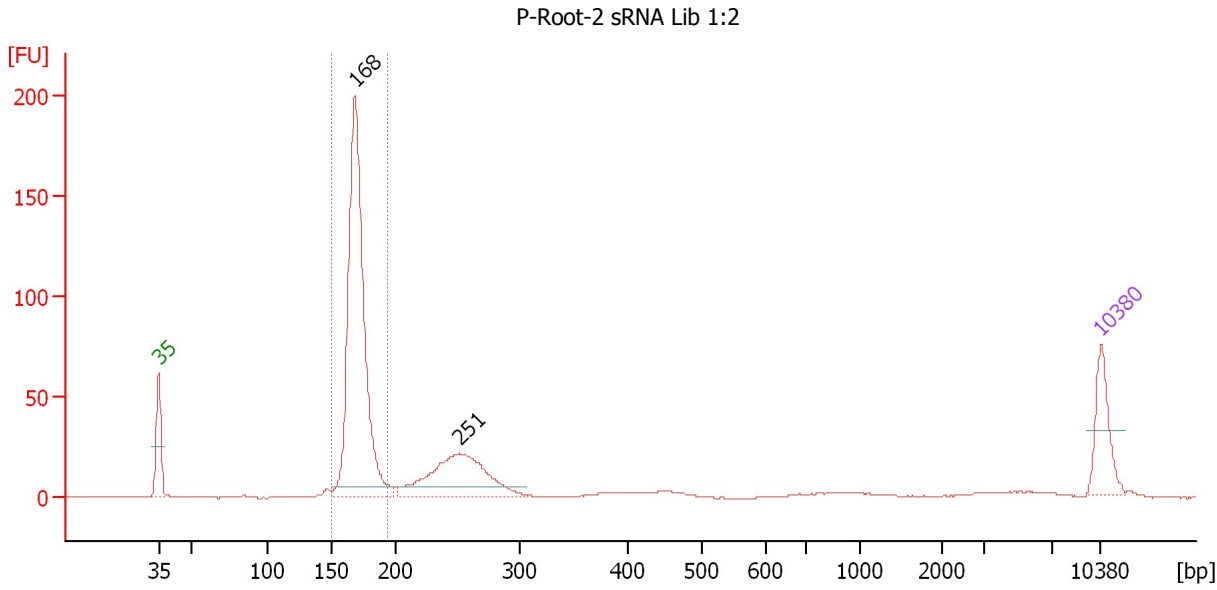
Region table for sample 2 : P-Root-1 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
151	196	170	13,757.4	1,545.65	1,011.5	61	4.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : P-Root-2 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 468.6
 Noise: 0.2

Peak table for sample 3 : P-Root-2 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	168	875.78	7,876.5	
3	251	283.51	1,711.7	
4	10,380	75.00	10.9	Upper Marker

Region table for sample 3 : P-Root-2 sRNA Lib 1:2

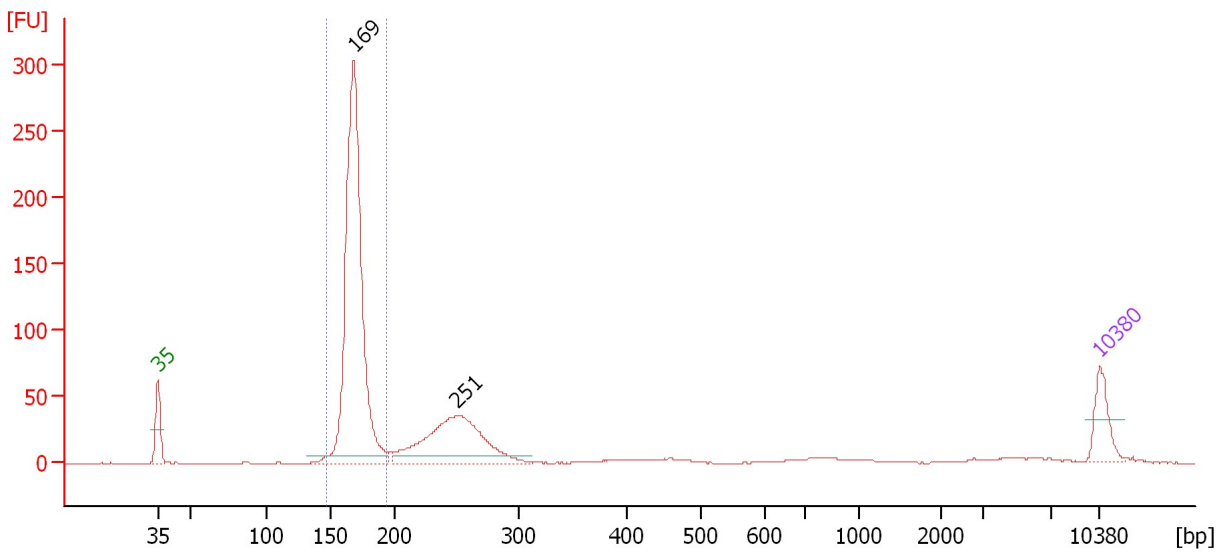
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
151	193	170	7,688.2	863.85	468.6	60	3.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...

P-Root-3 sRNA Lib 1:2



Overall Results for sample 4 : P-Root-3 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 725.7
 Noise: 0.2

Peak table for sample 4 : P-Root-3 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	169	1,352.95	12,161.8	
3	251	461.61	2,790.8	
4	10,380	75.00	10.9	Upper Marker

Region table for sample 4 : P-Root-3 sRNA Lib 1:2

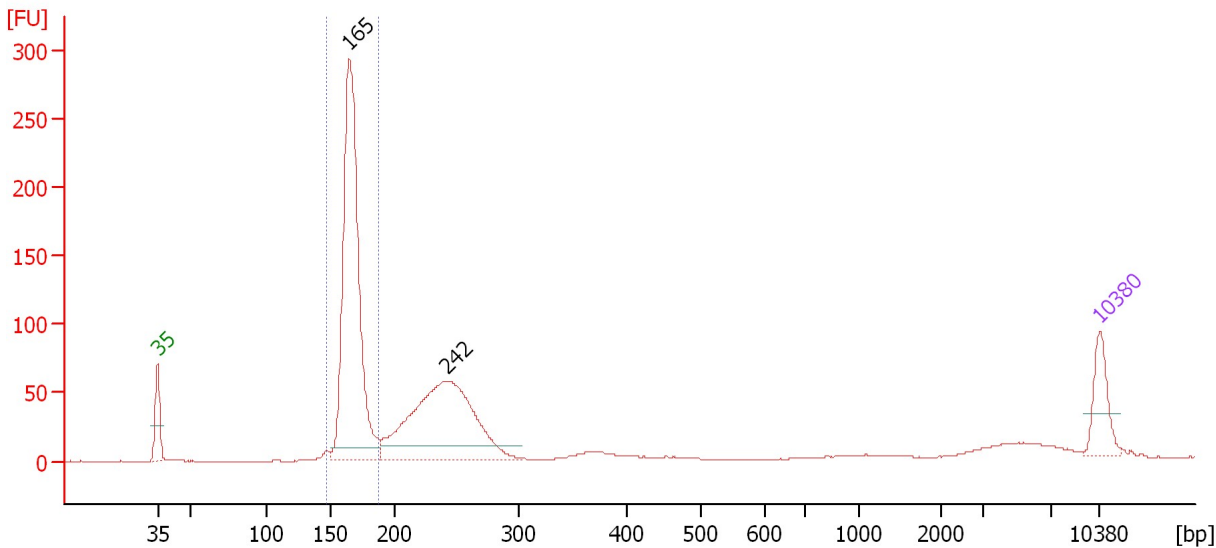
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
148	193	169	12,044.4	1,342.81	725.7	61	4.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...

M-Root-1 sRNA Lib 1:2



Setpoint Deviations for sample 5 : M-Root-1 sRNA Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 5 : M-Root-1 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 698.2
 Noise: 0.1

Peak table for sample 5 : M-Root-1 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	165	1,000.02	9,194.0	
3	242	650.44	4,079.5	
4	10,380	75.00	10.9	Upper Marker

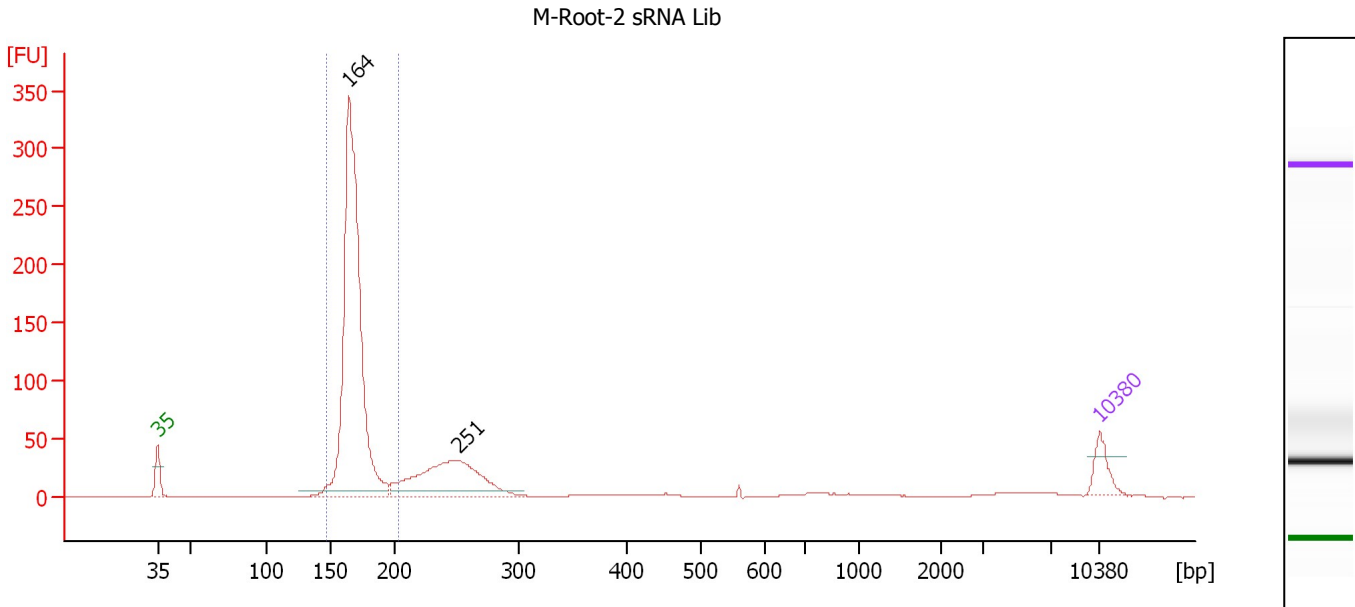
Region table for sample 5 : M-Root-1 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	188	167	9,078.4	999.78	698.2	46	3.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : M-Root-2 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 852.0
 Noise: 0.1

Peak table for sample 6 : M-Root-2 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	164	2,202.34	20,321.8	
3	251	617.36	3,719.7	
4	10,380	75.00	10.9	Upper Marker

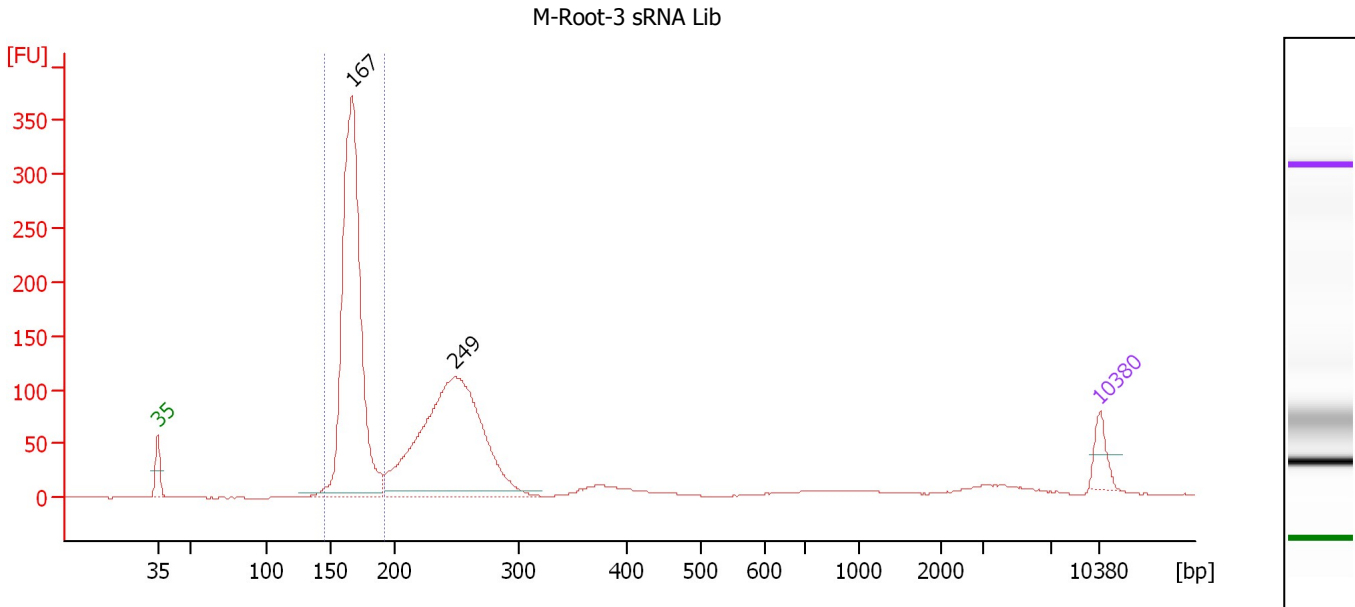
Region table for sample 6 : M-Root-2 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
147	203	169	19,764.9	2,197.58	852.0	65	4.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : M-Root-3 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 1,013.0
 Noise: 0.2

Peak table for sample 7 : M-Root-3 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	167	2,125.32	19,323.2	
3	249	1,734.13	10,546.2	
4	10,380	75.00	10.9	Upper Marker

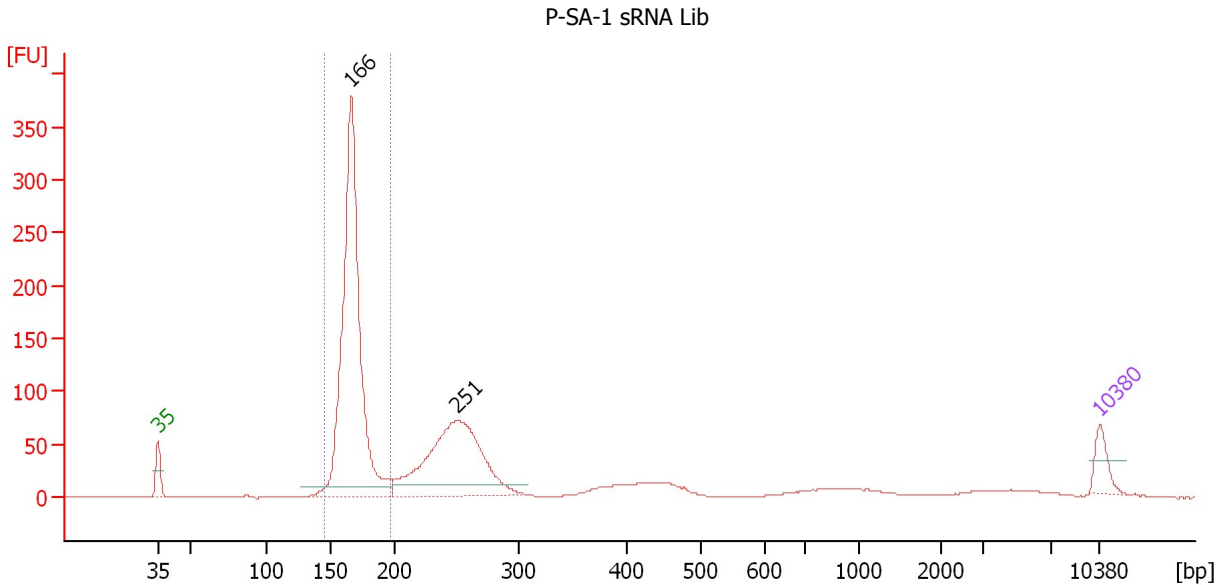
Region table for sample 7 : M-Root-3 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
145	193	167	19,265.3	2,128.55	1,013.0	43	4.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : P-SA-1 sRNA Lib

Height Threshold [FU] : 10

Overall Results for sample 8 : P-SA-1 sRNA Lib

Number of peaks found: 2 Corr. Area 1: 941.0
 Noise: 0.1

Peak table for sample 8 : P-SA-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	166	2,100.43	19,129.1	
3	251	1,026.19	6,202.4	
4	10,380	75.00	10.9	Upper Marker

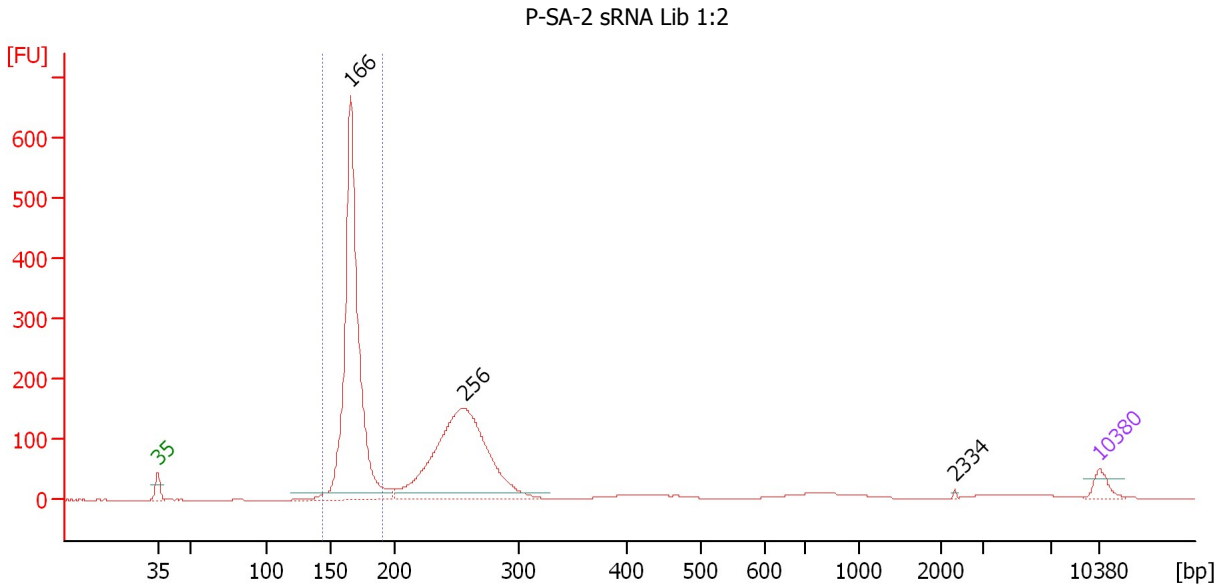
Region table for sample 8 : P-SA-1 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
146	197	167	18,963.1	2,092.68	941.0	50	4.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : P-SA-2 sRNA Lib 1:2

Height Threshold [FU] : 10

Overall Results for sample 9 : P-SA-2 sRNA Lib 1:2

Number of peaks found: 3 Corr. Area 1: 1,303.6
 Noise: 0.1

Peak table for sample 9 : P-SA-2 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	166	3,435.43	31,382.6	
3	256	2,396.17	14,193.3	
4	2,334	5.86	3.8	
5	10,380	75.00	10.9	Upper Marker

Region table for sample 9 : P-SA-2 sRNA Lib 1:2

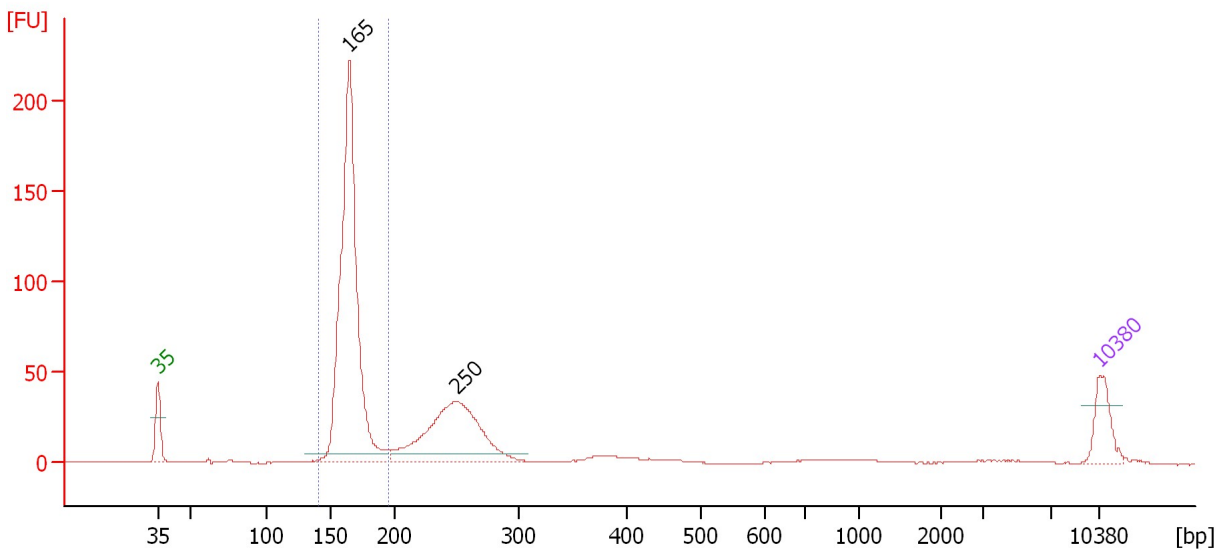
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
145	190	167	30,240.9	3,338.45	1,303.6	47	4.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...

P-SA-3 sRNA Lib 1:2



Overall Results for sample 10 : P-SA-3 sRNA Lib 1:2

Number of peaks found: 2 Corr. Area 1: 522.0
 Noise: 0.1

Peak table for sample 10 : P-SA-3 sRNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	165	1,280.21	11,763.5	
3	250	528.17	3,207.2	
4	10,380	75.00	10.9	Upper Marker

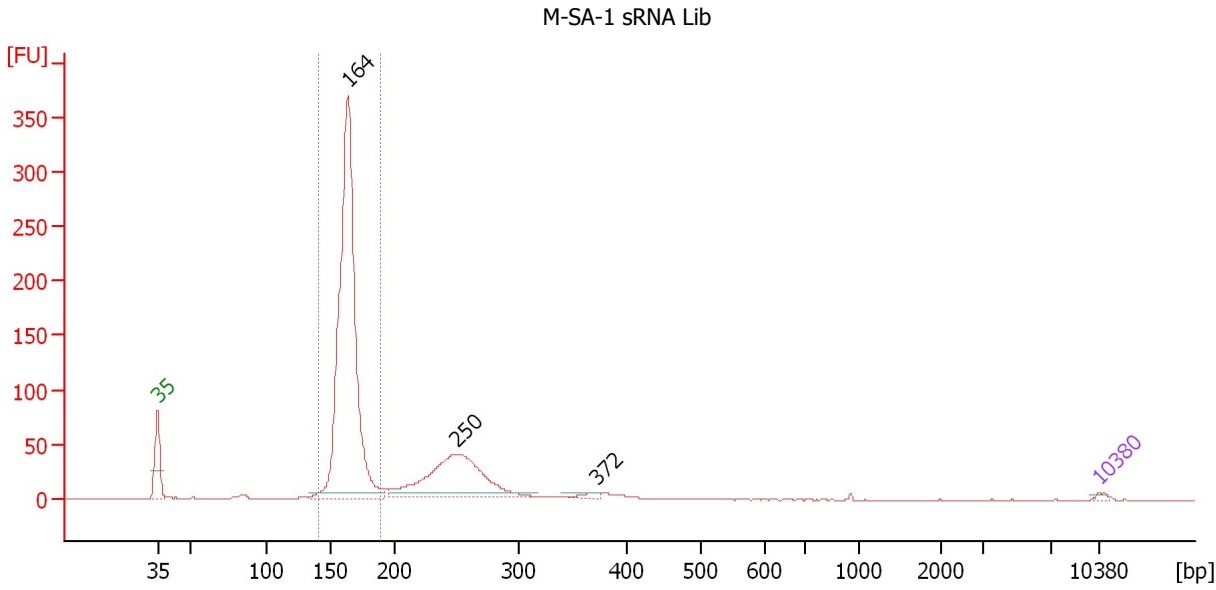
Region table for sample 10 : P-SA-3 sRNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
141	195	165	11,725.6	1,278.13	522.0	62	4.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-28\2013-08-28_003.xad

Created: 8/28/2013 11:22:01 AM
 Modified: 8/28/2013 12:08:51 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : M-SA-1 sRNA Lib

Number of peaks found: 3 Corr. Area 1: 839.7
 Noise: 0.1

Peak table for sample 11 : M-SA-1 sRNA Lib

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	164	19,610.08	181,705.3	
3	250	6,058.73	36,758.4	
4	372	174.55	710.6	
5	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : M-SA-1 sRNA Lib

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
141	190	164	181,790.1	19,622.39	839.7	68	4.3	Blue