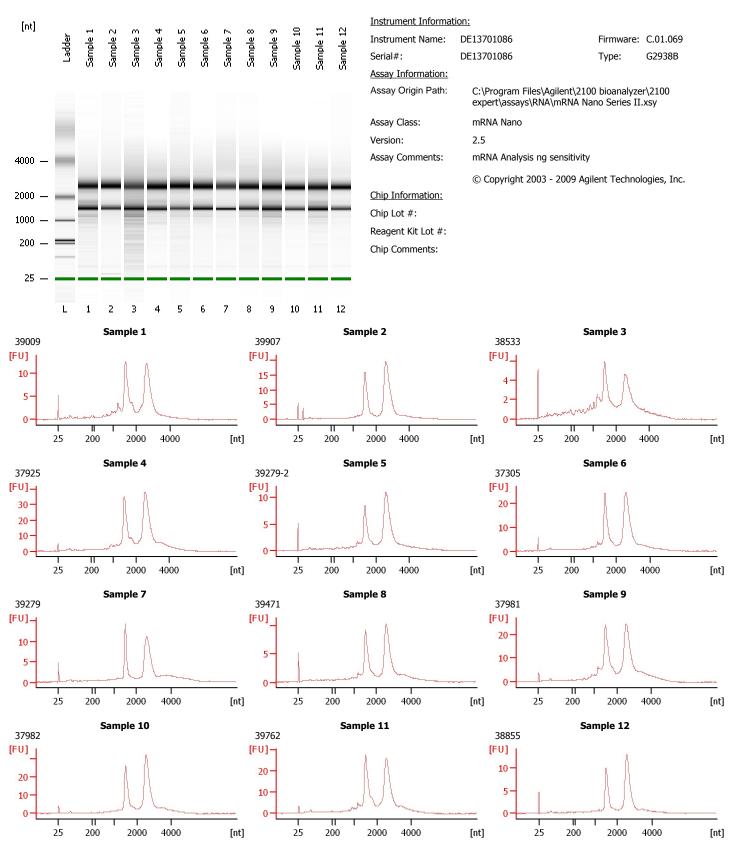
2015-07-30_001.xad Page 1 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Created: 7/30/2015 11:21:51 AM

Electrophoresis File Run Summary



Printed:

7/30/2015 12:11:56 PM

2015-07-30_001.xad Page 2 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status Result Label	Result Color
Sample 1	39009	~	
Sample 2	39907	✓	
Sample 3	38533	✓	
Sample 4	37925	✓	
Sample 5	39279-2	✓	
Sample 6	37305	✓	
Sample 7	39279	✓	
Sample 8	39471	✓	
Sample 9	37981	✓	
Sample 10	37982	✓	
Sample 11	39762	✓	
Sample 12	38855	✓	
Ladder		✓	

Chip Lot # Reagent Kit Lot #

Chip Comments:

2015-07-30_001.xad Page 3 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.): 13

Minimum Visible Range [s]: 14

Maximum Visible Range [s]: 85

Start Analysis Time Range [s]: 15

End Analysis Time Range [s]: 84

Ladder Concentration [ng/µl]: 150

Lower Marker Concentration [ng/µl]: 0

Upper Marker Concentration [ng/µl]: 0

Used Lower Marker for Quantitation

Standard Curve Fit is Logarithmic

Show Data Aligned to Lower Marker

Integrator Settings

Integration Start Time [s]: 15
Integration End Time [s]: 84
Slope Threshold: 0.2
Height Threshold [FU]: 0.5
Area Threshold: 0.1
Width Threshold [s]: 0.2
Baseline Plateau [s]: 0.5

Filter Settings

Filter Width [s]: 0.5 Polynomial Order: 4

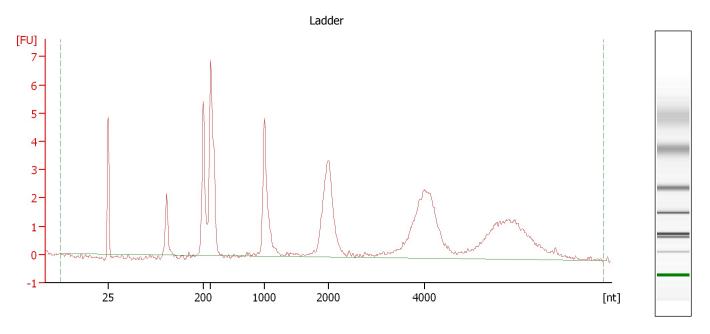
Ladder

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

2015-07-30_001.xad Page 4 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary



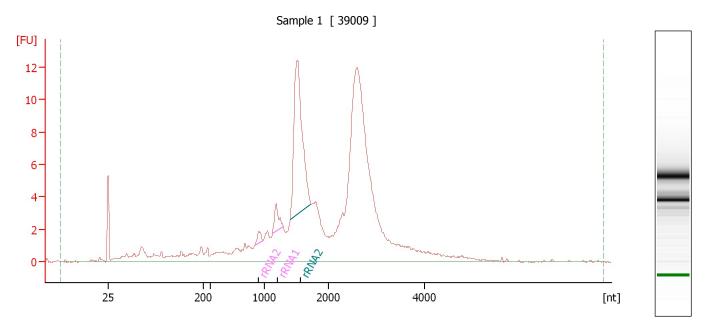
Overall Results for Ladder

RNA Area: 70.7 RNA Concentration: 150 ng/µl

2015-07-30_001.xad Page 5 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Sample 1

RNA Area: 181.5 rRNA Contamination: 15.4 %

RNA Concentration: 385 ng/µl

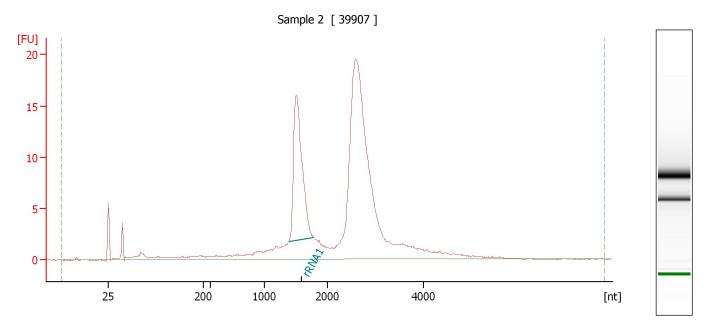
Fragment table for sample 1 : <u>Sample 1</u>

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA2	907	985	1.0	0.5
rRNA1	1,125	1,293	2.3	1.3
rRNA2	1,400	1.725	24.7	13.6

2015-07-30_001.xad Page 6 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : <u>Sample 2</u>

RNA Area: 205.1 rRNA Contamination: 18.5 %

RNA Concentration: 435 ng/µl

Fragment table for sample 2: Sample 2

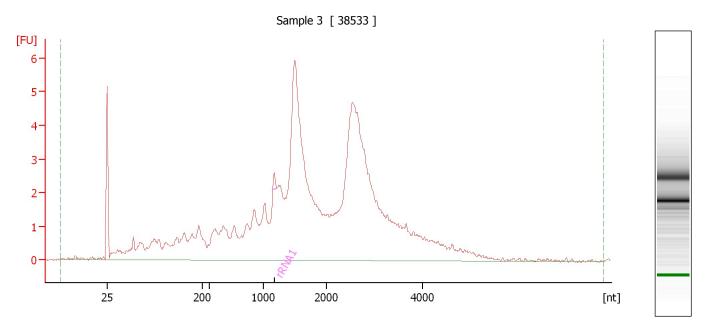
 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,394
 1,777
 38.0
 18.5

2015-07-30_001.xad Page 7 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 3: Sample 3

RNA Area: 126.7 rRNA Contamination: 0.2 %

RNA Concentration: 269 ng/µl

Fragment table for sample 3: <u>Sample 3</u>

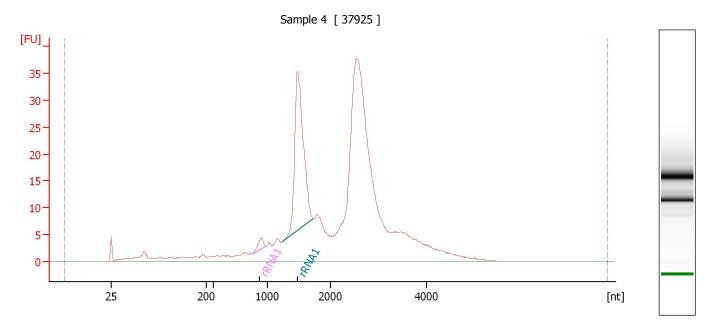
 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,155
 1,212
 0.3
 0.2

2015-07-30_001.xad Page 8 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 4: Sample 4

RNA Area: 509.6 rRNA Contamination: 16.7 %

RNA Concentration: 1,082 ng/µl

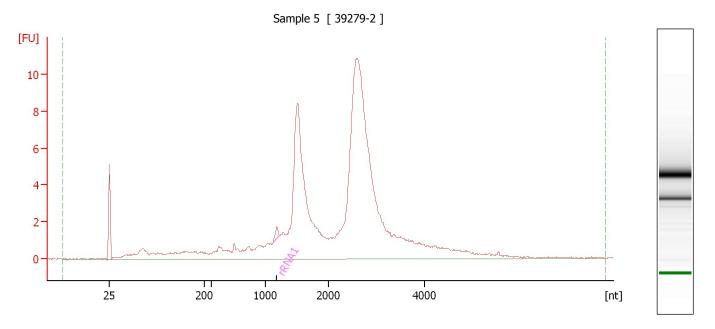
Fragment table for sample 4: Sample 4

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA1	872	988	3.8	0.7
rRNA1	1.249	1.733	81.6	16.0

2015-07-30_001.xad Page 9 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : <u>Sample 5</u>

RNA Area: 140.8 rRNA Contamination: 0.4 %

RNA Concentration: 299 ng/µl

Fragment table for sample 5 : <u>Sample 5</u>

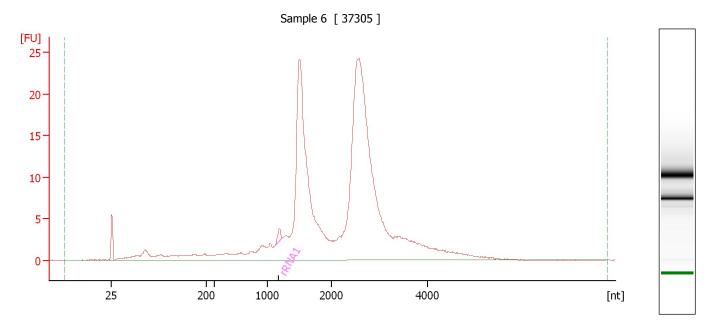
 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,124
 1,224
 0.6
 0.4

2015-07-30_001.xad Page 10 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : <u>Sample 6</u>

RNA Area: 313.4 rRNA Contamination: 0.5 %

RNA Concentration: 665 ng/µl

Fragment table for sample 6 : <u>Sample 6</u>

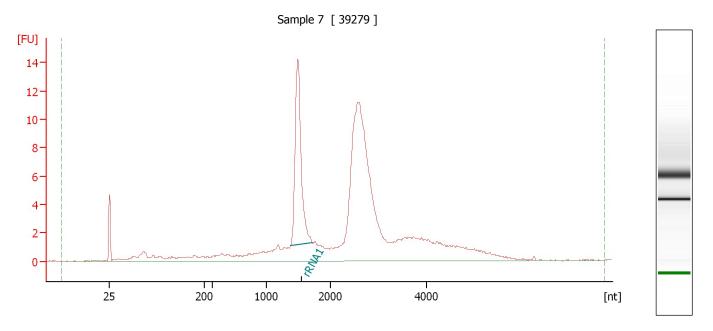
 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,112
 1,224
 1.4
 0.5

2015-07-30_001.xad Page 11 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 7: Sample 7

RNA Area: 149.0 rRNA Contamination: 16.6 %

RNA Concentration: 316 ng/µl

Fragment table for sample 7: <u>Sample 7</u>

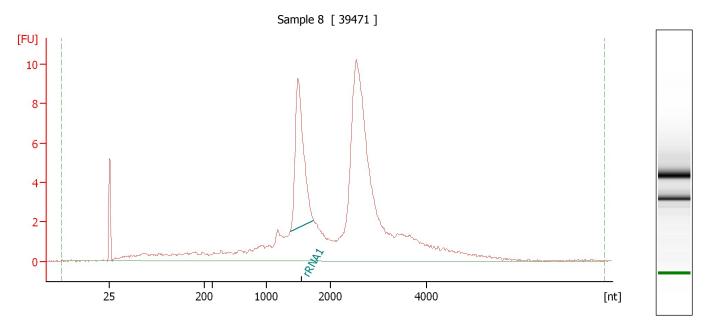
 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,381
 1,717
 24.8
 16.6

2015-07-30_001.xad Page 12 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : <u>Sample 8</u>

RNA Area: 135.4 rRNA Contamination: 14.5 %

RNA Concentration: 287 ng/µl

Fragment table for sample 8 : <u>Sample 8</u>

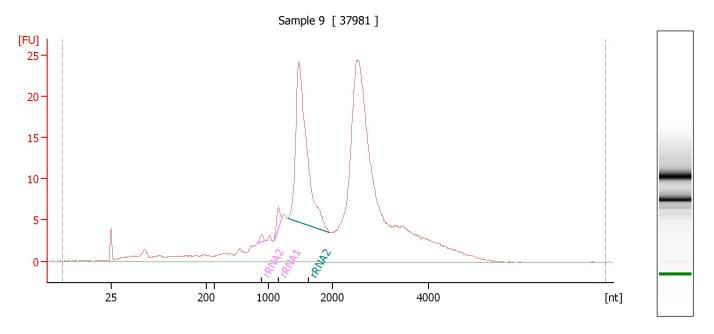
 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,374
 1,736
 19.6
 14.5

2015-07-30_001.xad Page 13 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : <u>Sample 9</u>

RNA Area: 394.1 rRNA Contamination: 18.3 %

RNA Concentration: 837 ng/µl

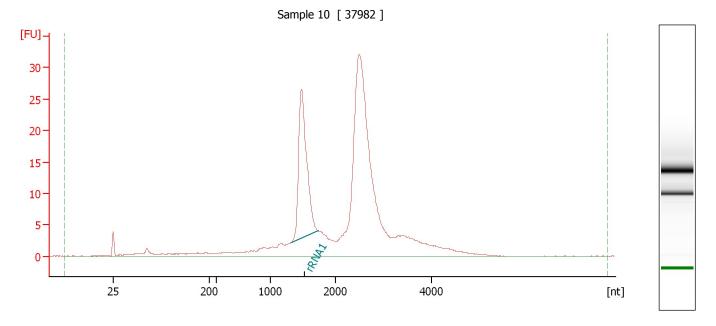
Fragment table for sample 9: Sample 9

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA2	897	978	1.0	0.3
rRNA1	1,094	1,219	2.7	0.7
rRNA2	1,312	1,953	68.5	17.4

2015-07-30_001.xad Page 14 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 10 : Sample 10

RNA Area: 325.5 rRNA Contamination: 18.5 %

RNA Concentration: 691 ng/µl

Fragment table for sample 10 : Sample 10

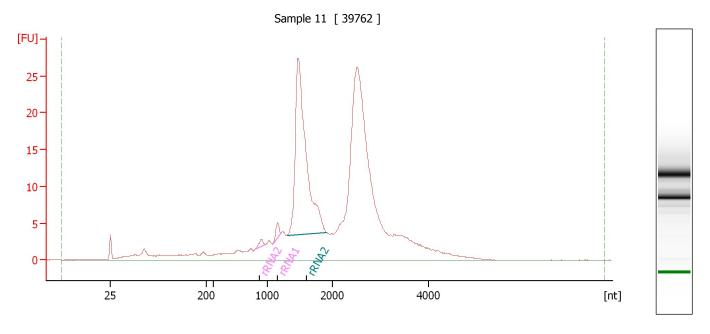
 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,324
 1,734
 60.3
 18.5

2015-07-30_001.xad Page 15 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 11: Sample 11

RNA Area: 373.6 rRNA Contamination: 22.8 %

RNA Concentration: 793 ng/µl

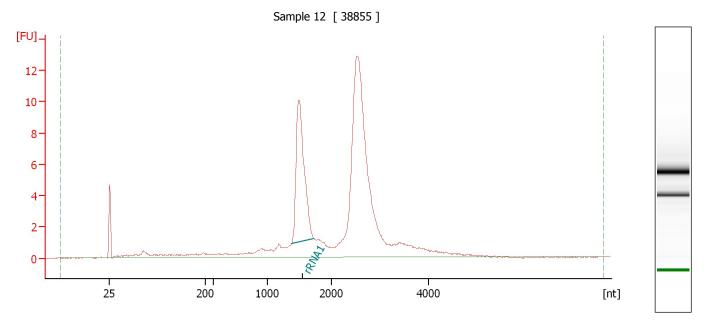
Fragment ta	ble '	for samp	le 1:	1:	<u>Sample 11</u>
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Name	Start Size [nt]	End Size [nt]	Area	% of total Area
rRNA2	879	979	1.4	0.4
rRNA1	1,088	1,213	2.3	0.6
rRNA2	1,299	1,914	81.3	21.8

2015-07-30_001.xad Page 16 of 17

Assay Class: mRNA Nano Created: 7/30/2015 10:54:49 AM Data Path: C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad Modified: 7/30/2015 11:21:51 AM

Electropherogram Summary Continued ...



Overall Results for sample 12 : Sample 12

RNA Area: 114.8 rRNA Contamination: 19.9 %

RNA Concentration: 244 ng/µl

Fragment table for sample 12 : Sample 12

 Name
 Start Size [nt]
 End Size [nt]
 Area
 % of total Area

 rRNA1
 1,374
 1,714
 22.8
 19.9

2015-07-30_001.xad Page 17 of 17

Assay Class: Data Path: Created: Modified: 7/30/2015 10:54:49 AM 7/30/2015 11:21:51 AM mRNA Nano C:\...ents and Settings\Bioanalyzer\2015-07-30\2015-07-30_001.xad **Gel Image** [nt] Sample 12 Sample 2 Sample 4 Ladder 4000 — 2000 — 1000 -500 — 200 — 25 2 3 10 11 12