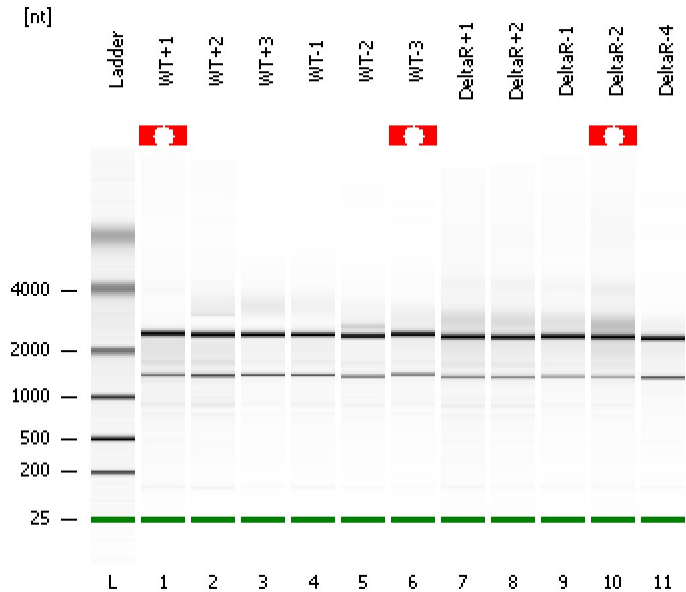


Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

### Electrophoresis File Run Summary



#### Instrument Information:

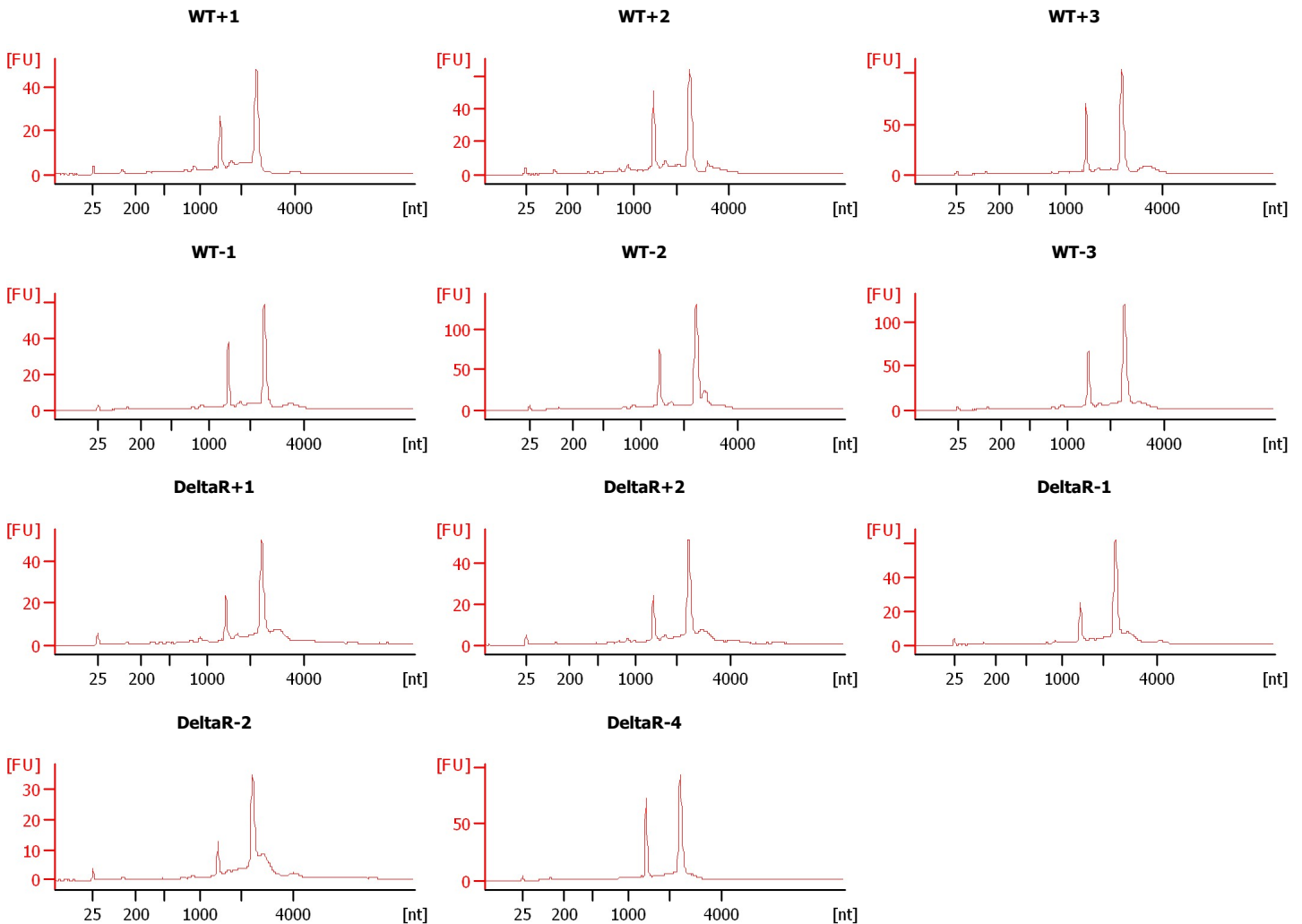
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

#### Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Prokaryote Total RNA Pico Series II.xsy  
Assay Class: Prokaryote Total RNA Pico  
Version: 2.5  
Assay Comments: Total RNA Analysis pg sensitivity (Prokaryote)  
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#### Chip Information:

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



Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Status	Result Label	Result Color
WT+1		✓		
WT+2		✓		
WT+3		✓		
WT-1		✓		
WT-2		✓		
WT-3		✓		
DeltaR+1		✓		
DeltaR+2		✓		
DeltaR-1		✓		
DeltaR-2		✓		
DeltaR-4		✓		
Ladder		✓		

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

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

## Electrophoresis Assay Details

### General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12  
Minimum Visible Range [s] : 17  
Maximum Visible Range [s] : 70  
Start Analysis Time Range [s] : 18  
End Analysis Time Range [s] : 69  
Ladder Concentration [pg/ $\mu$ l] : 1000  
Lower Marker Concentration [pg/ $\mu$ l] : 0  
Upper Marker Concentration [pg/ $\mu$ l] : 0  
Used Lower Marker for Quantitation  
Standard Curve Fit is Logarithmic  
Show Data Aligned to Lower Marker

### Integrator Settings

Integration Start Time [s] : 18  
Integration End Time [s] : 69  
Slope Threshold : 0.6  
Height Threshold [FU] : 0.5  
Area Threshold : 0.2  
Width Threshold [s] : 0.3  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

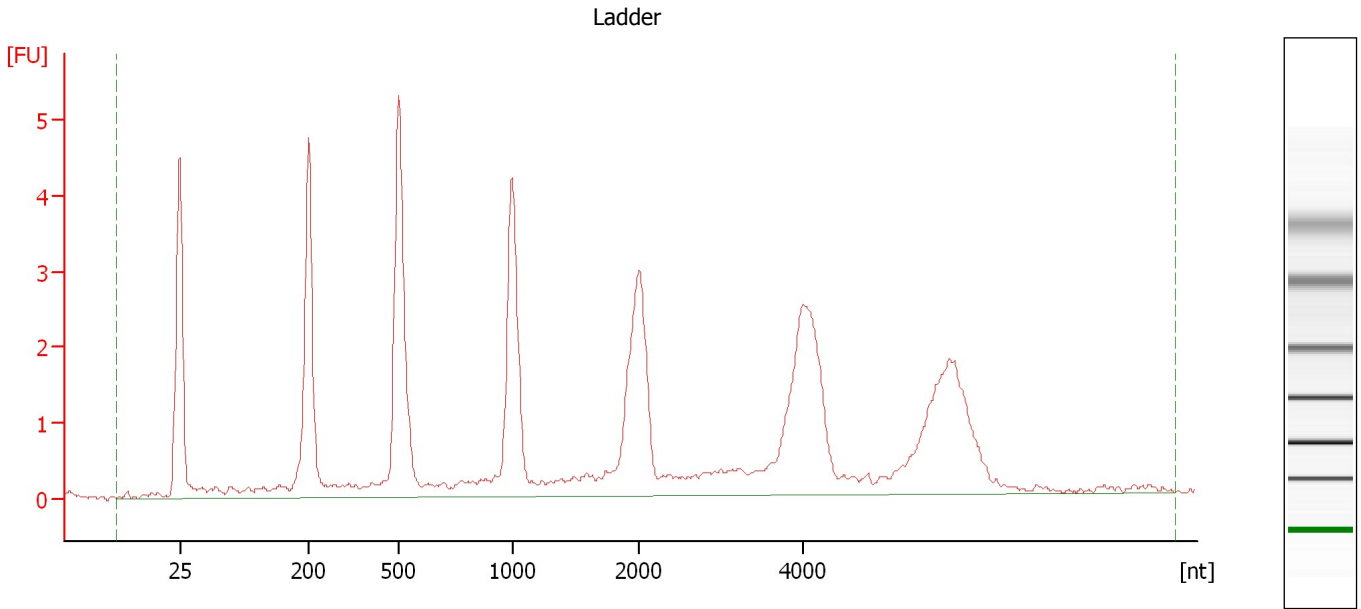
### Ladder

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

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary**



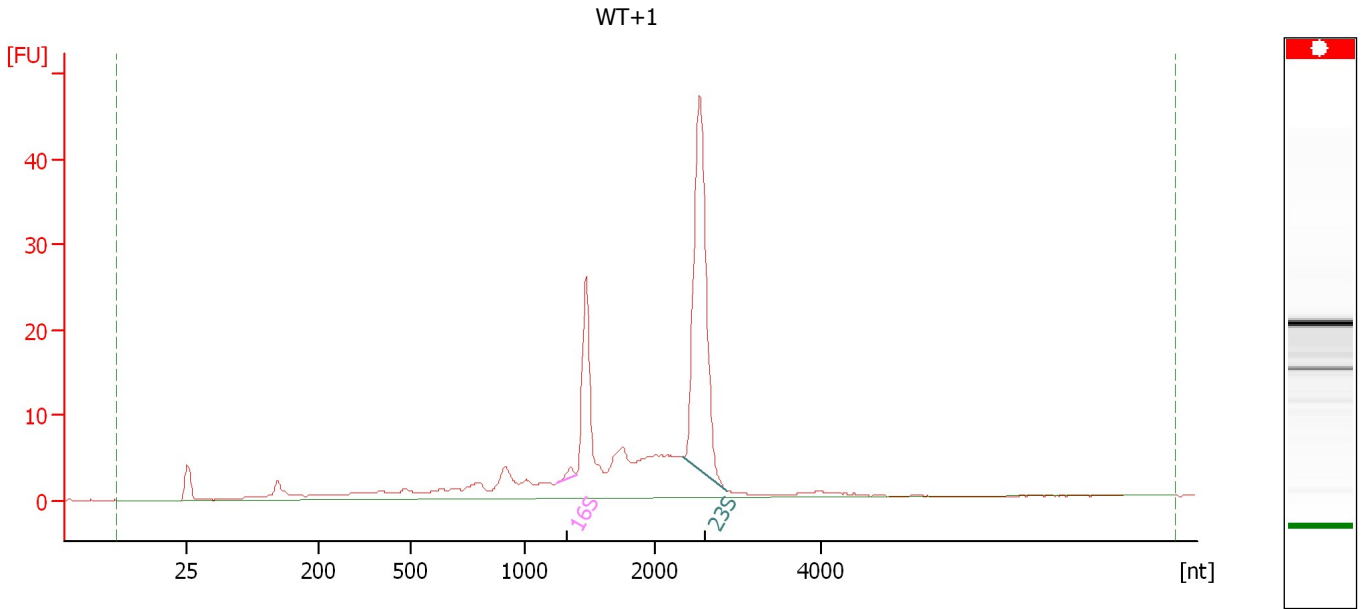
**Overall Results for Ladder**

RNA Area: 58.7                      RNA Concentration: 1,000 pg/μl

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : WT+1**

RNA Area: 204.0                      rRNA Ratio [23s / 16s]: 61.2  
RNA Concentration: 3,476 pg/μl                      RNA Integrity Number (RIN): N/A (B.02.08)

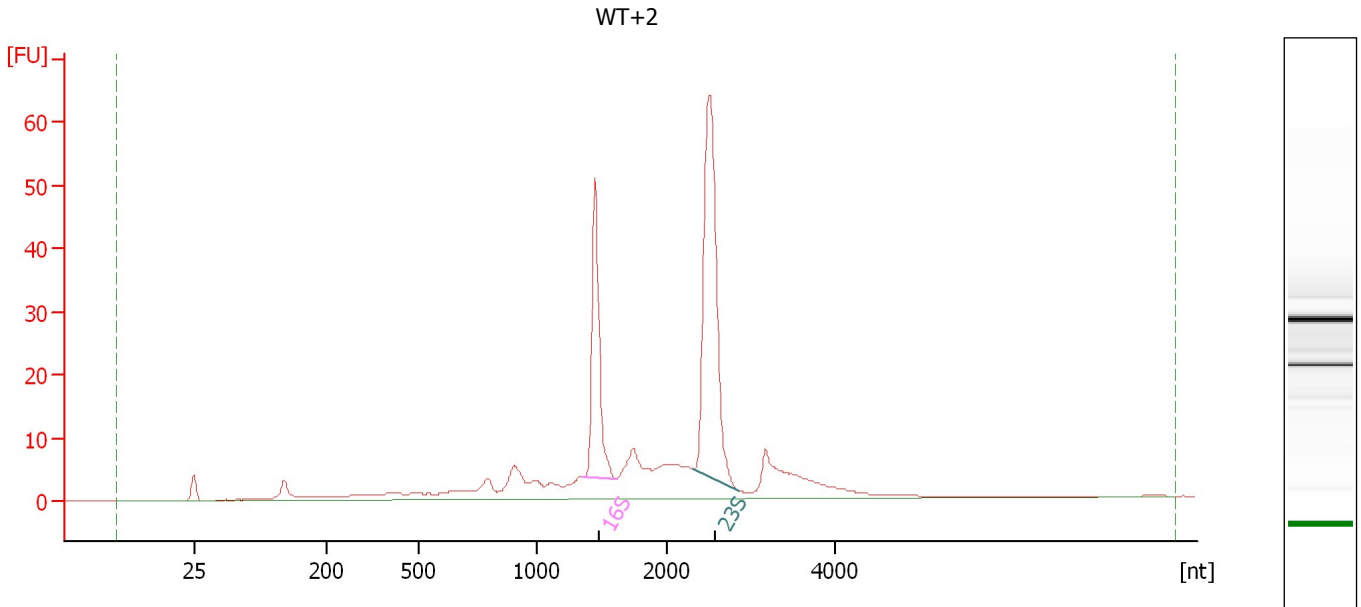
**Fragment table for sample 1 : WT+1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,241	1,398	1.0	0.5
23S	2,351	2,866	63.5	31.1

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : WT+2**

RNA Area: 294.0                      rRNA Ratio [23s / 16s]: 2.0  
RNA Concentration: 5,010 pg/μl                      RNA Integrity Number (RIN): 8.5 (B.02.08)

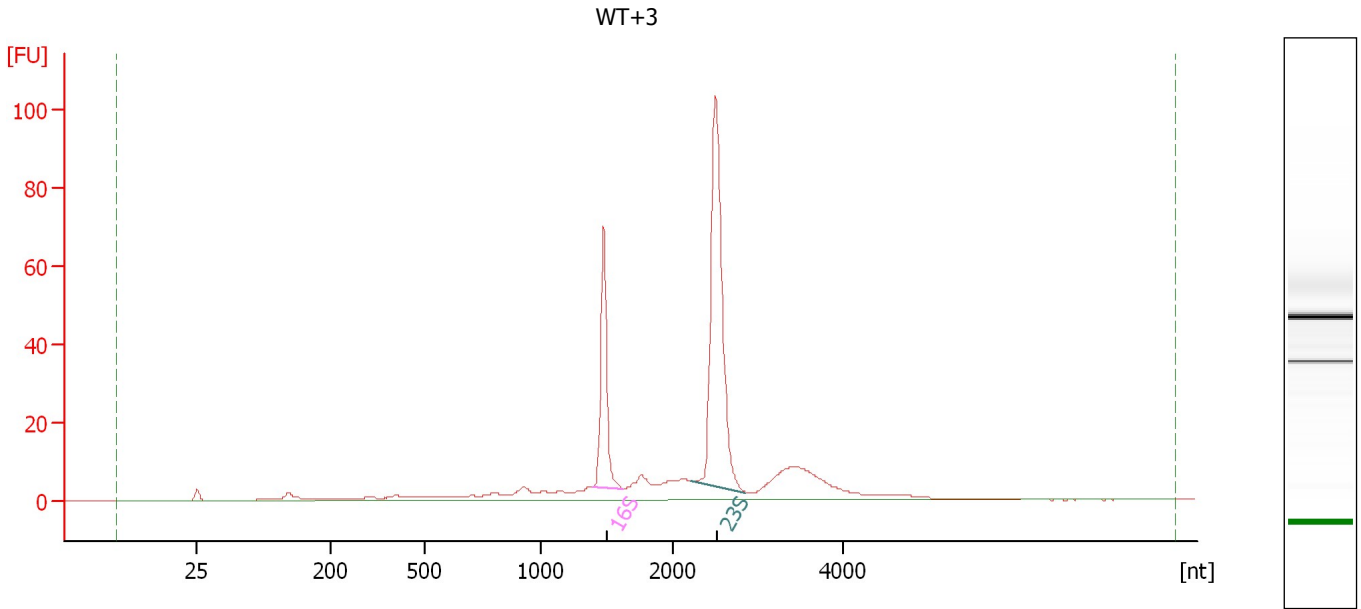
**Fragment table for sample 2 : WT+2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,359	1,612	43.4	14.8
23S	2,311	2,858	88.5	30.1

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : WT+3**

RNA Area: 351.4                      rRNA Ratio [23s / 16s]: 2.5  
RNA Concentration: 5,988 pg/μl              RNA Integrity Number (RIN): 9.2 (B.02.08)

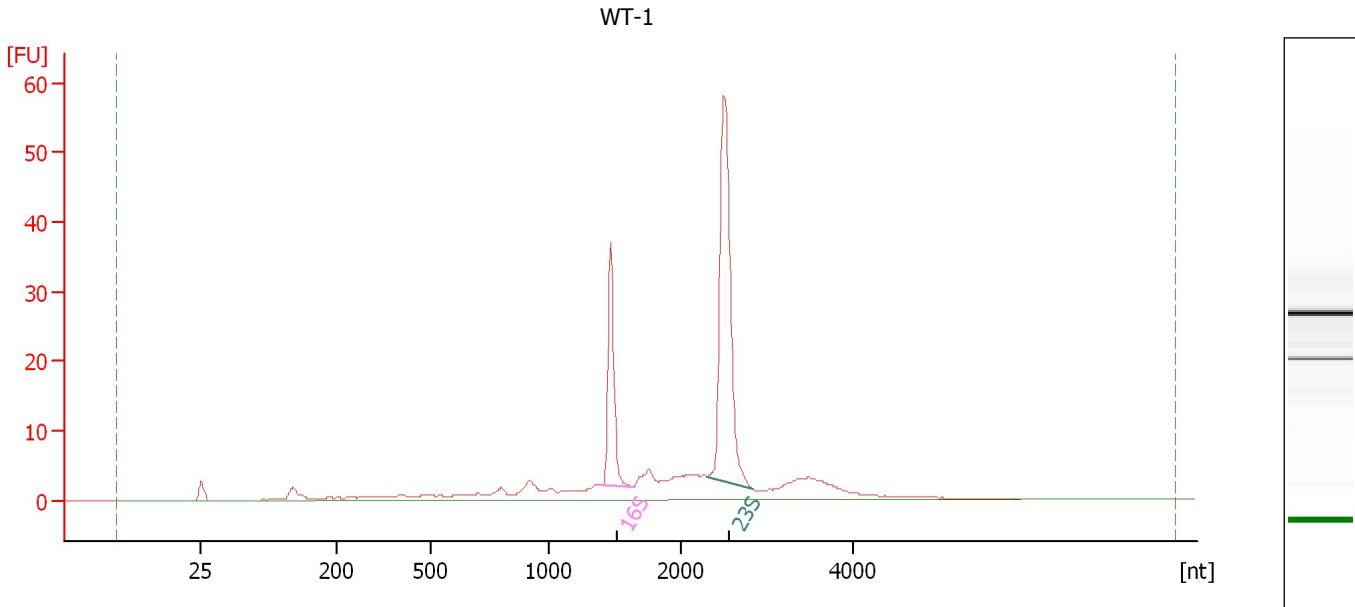
**Fragment table for sample 3 : WT+3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,388	1,624	52.4	14.9
23S	2,223	2,854	129.8	37.0

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : WT-1**

RNA Area: 195.0                      rRNA Ratio [23s / 16s]: 2.5  
RNA Concentration: 3,322 pg/μl                      RNA Integrity Number (RIN): 8.8 (B.02.08)

**Fragment table for sample 4 : WT-1**

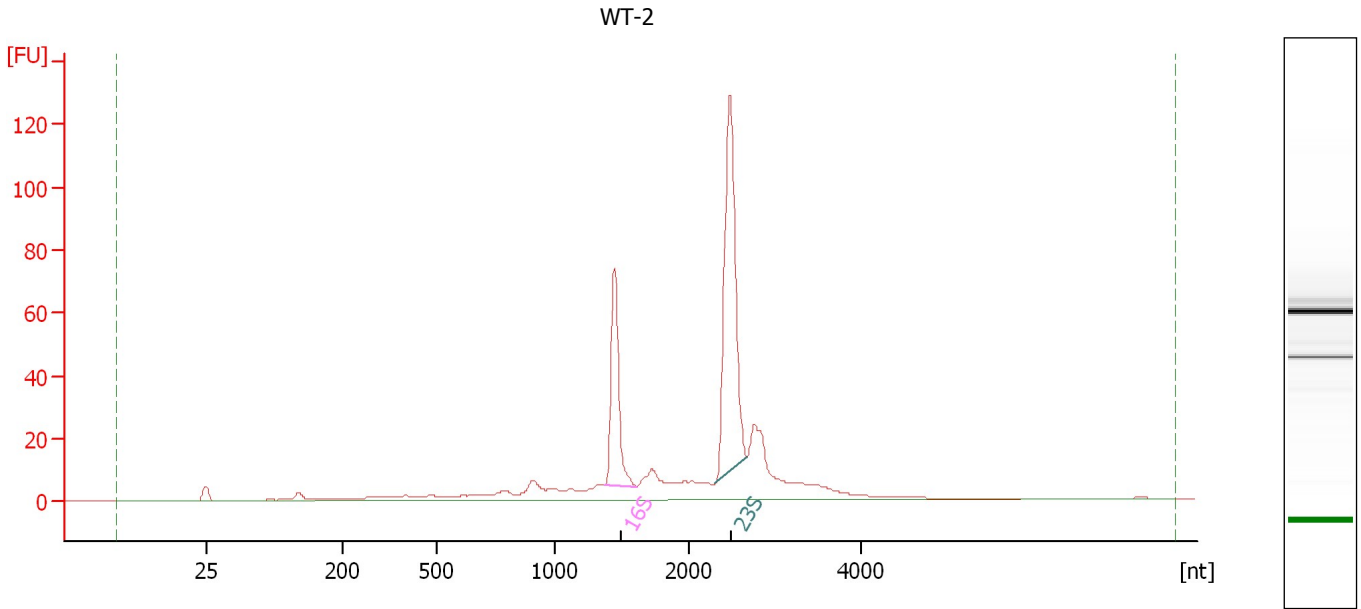
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,395	1,628	26.1	13.4
23S	2,310	2,849	64.8	33.2



Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : WT-2**

RNA Area: 457.9                      rRNA Ratio [23s / 16s]: 2.3  
RNA Concentration: 7,803 pg/μl                      RNA Integrity Number (RIN): 8.8 (B.02.08)

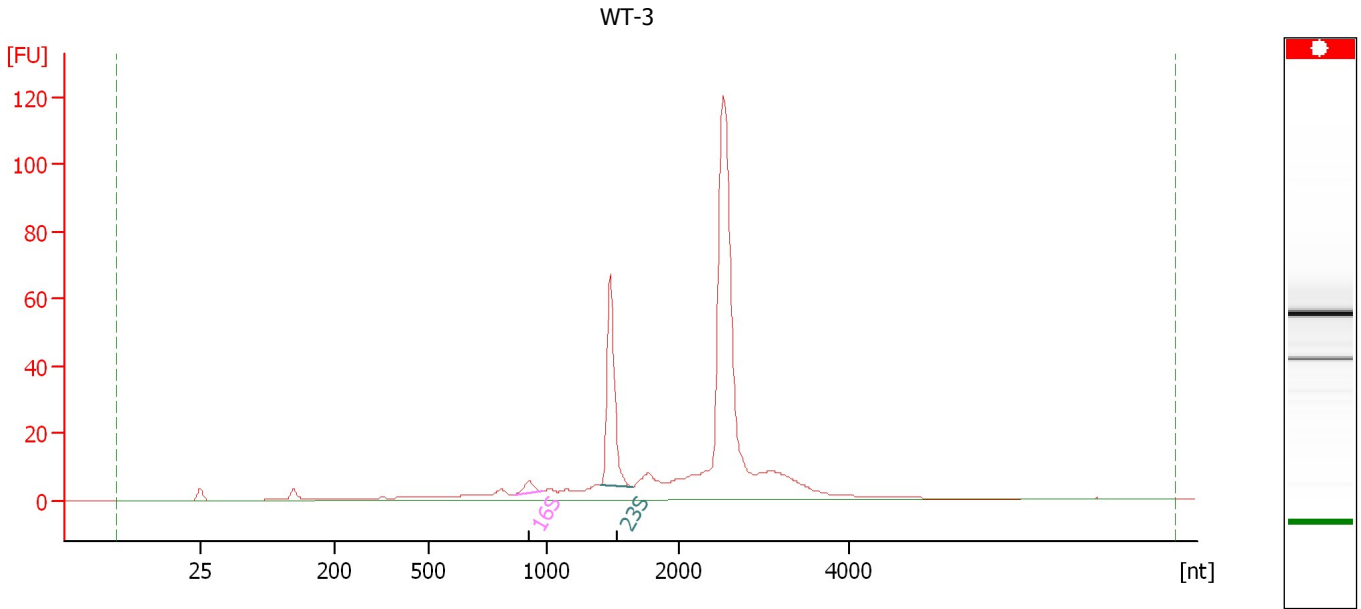
**Fragment table for sample 5 : WT-2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,361	1,601	63.6	13.9
23S	2,298	2,670	147.1	32.1

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : WT-3**

RNA Area: 424.3                      rRNA Ratio [23s / 16s]: 12.1  
RNA Concentration: 7,230 pg/μl                      RNA Integrity Number (RIN): N/A (B.02.08)

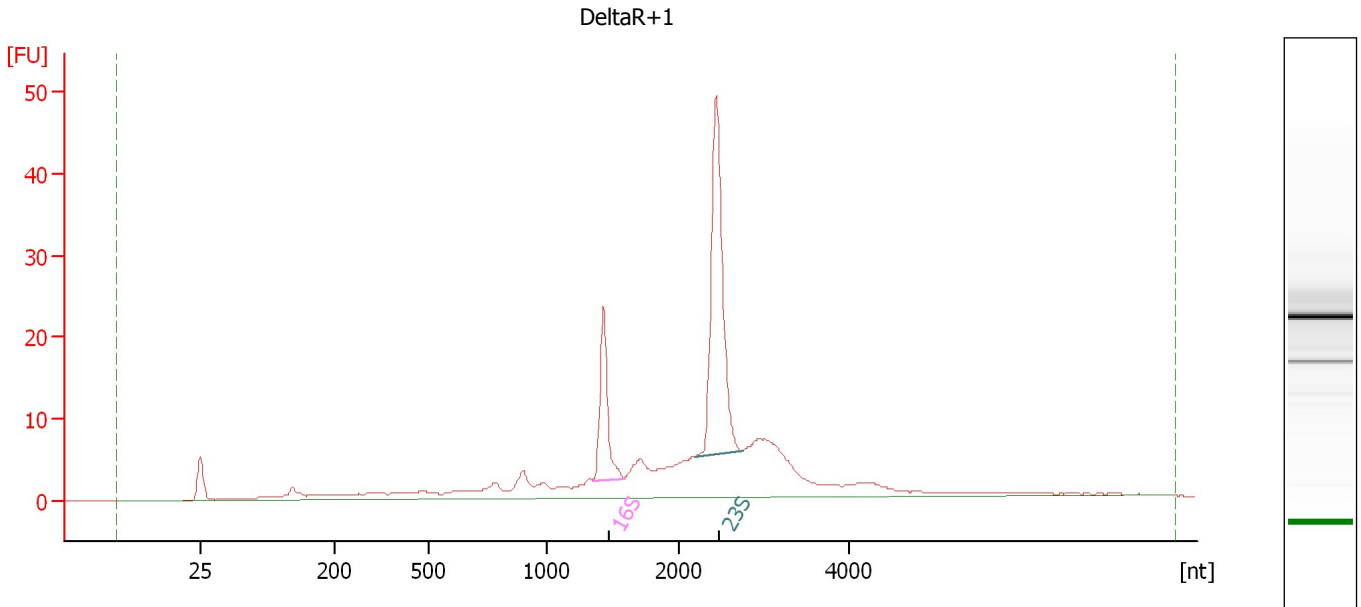
**Fragment table for sample 6 : WT-3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	868	981	4.9	1.2
23S	1,401	1,643	59.6	14.1

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : DeltaR+1**

RNA Area: 239.7 rRNA Ratio [23s / 16s]: 2.8  
RNA Concentration: 4,084 pg/μl RNA Integrity Number (RIN): 8.3 (B.02.08)

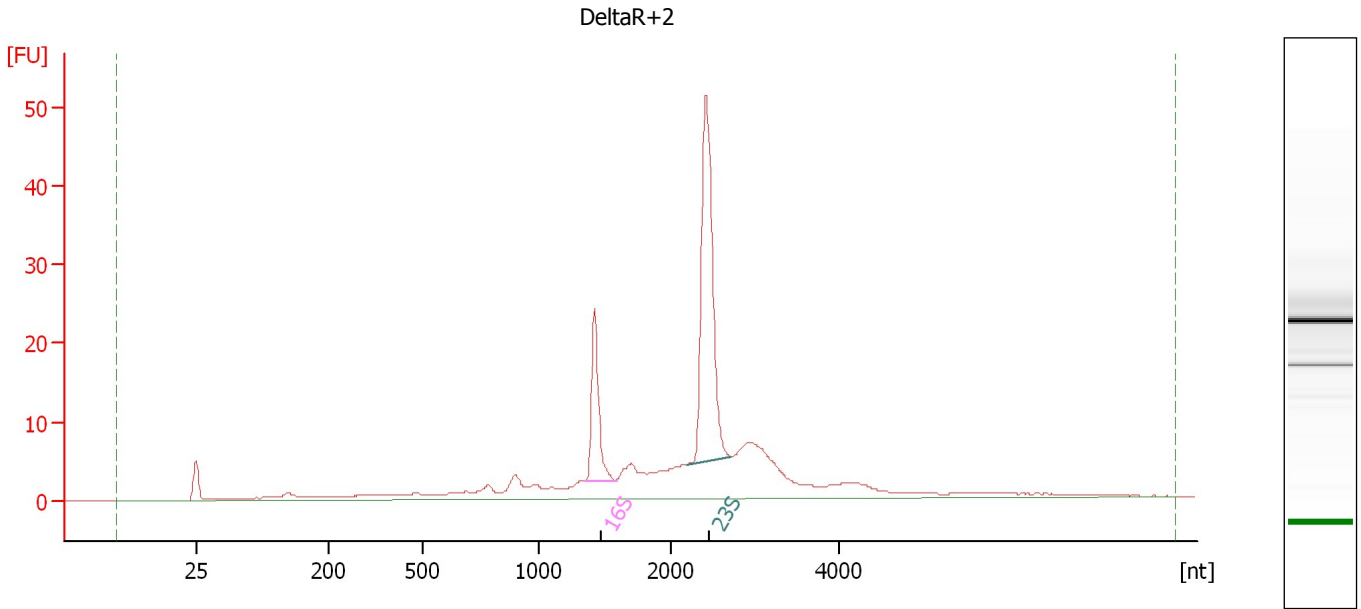
**Fragment table for sample 7 : DeltaR+1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,345	1,587	20.4	8.5
23S	2,173	2,737	57.5	24.0

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : DeltaR+2**

RNA Area: 229.5 rRNA Ratio [23s / 16s]: 3.0  
RNA Concentration: 3,910 pg/μl RNA Integrity Number (RIN): 8.5 (B.02.08)

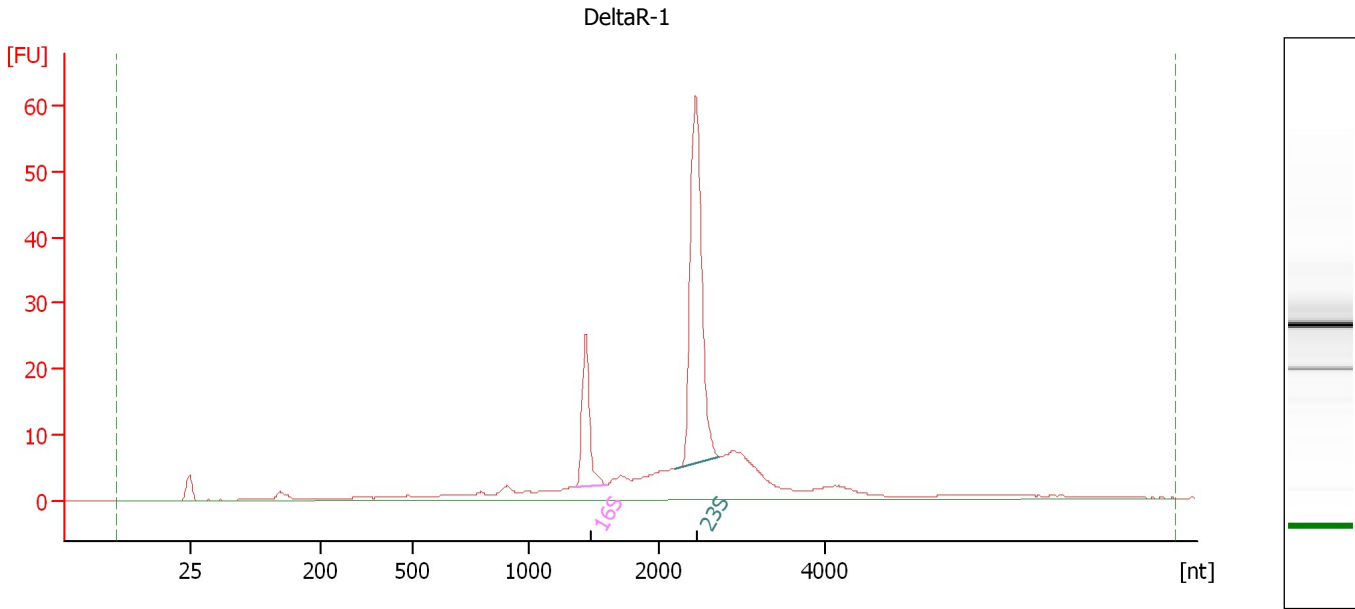
**Fragment table for sample 8 : DeltaR+2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,338	1,582	20.0	8.7
23S	2,197	2,703	59.1	25.8

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : DeltaR-1**

RNA Area: 236.1 rRNA Ratio [23s / 16s]: 3.3  
RNA Concentration: 4,023 pg/μl RNA Integrity Number (RIN): 8.7 (B.02.08)

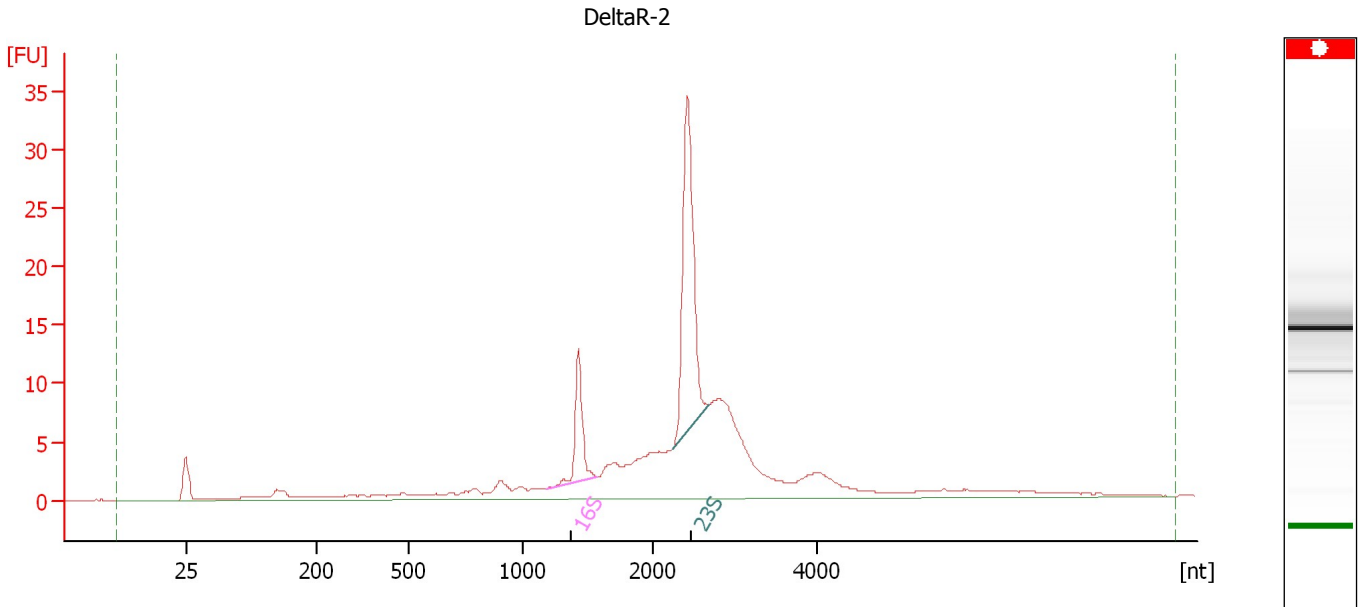
**Fragment table for sample 9 : DeltaR-1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,360	1,599	22.0	9.3
23S	2,209	2,735	73.5	31.1

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : DeltaR-2**

RNA Area: 174.5 rRNA Ratio [23s / 16s]: 3.3  
RNA Concentration: 2,974 pg/μl RNA Integrity Number (RIN): N/A (B.02.08)

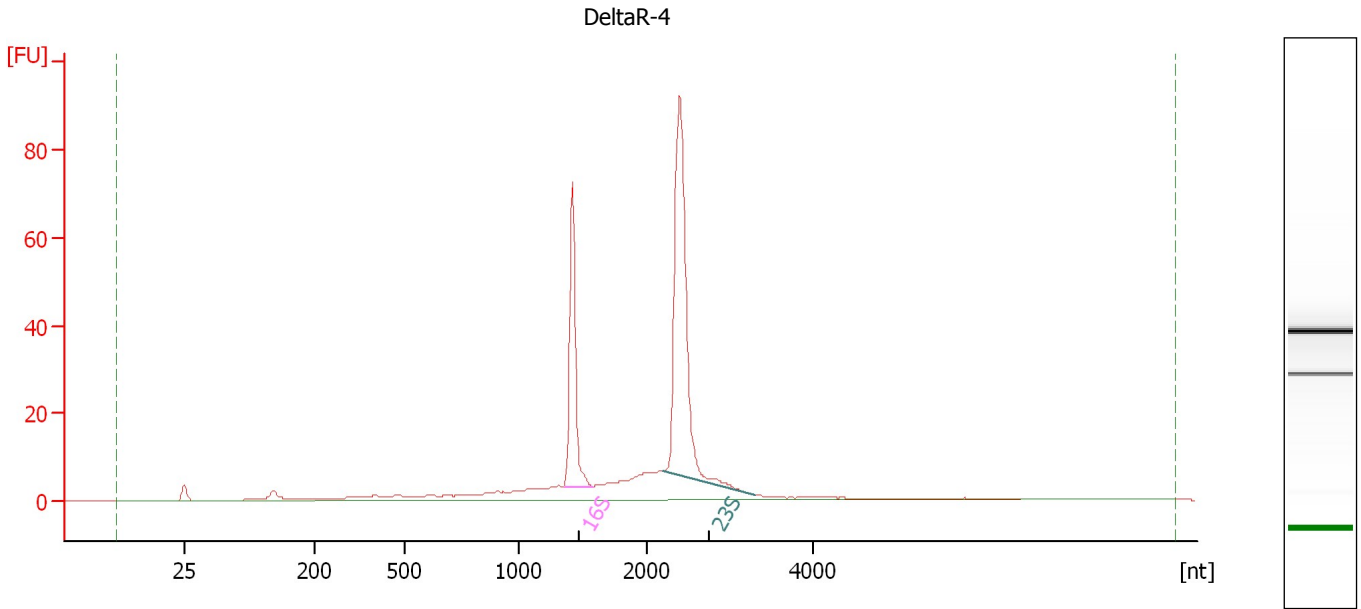
**Fragment table for sample 10 : DeltaR-2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,181	1,579	10.7	6.2
23S	2,248	2,686	35.9	20.6

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : DeltaR-4**

RNA Area: 311.0 rRNA Ratio [23s / 16s]: 2.1  
RNA Concentration: 5,299 pg/μl RNA Integrity Number (RIN): 9.1 (B.02.08)

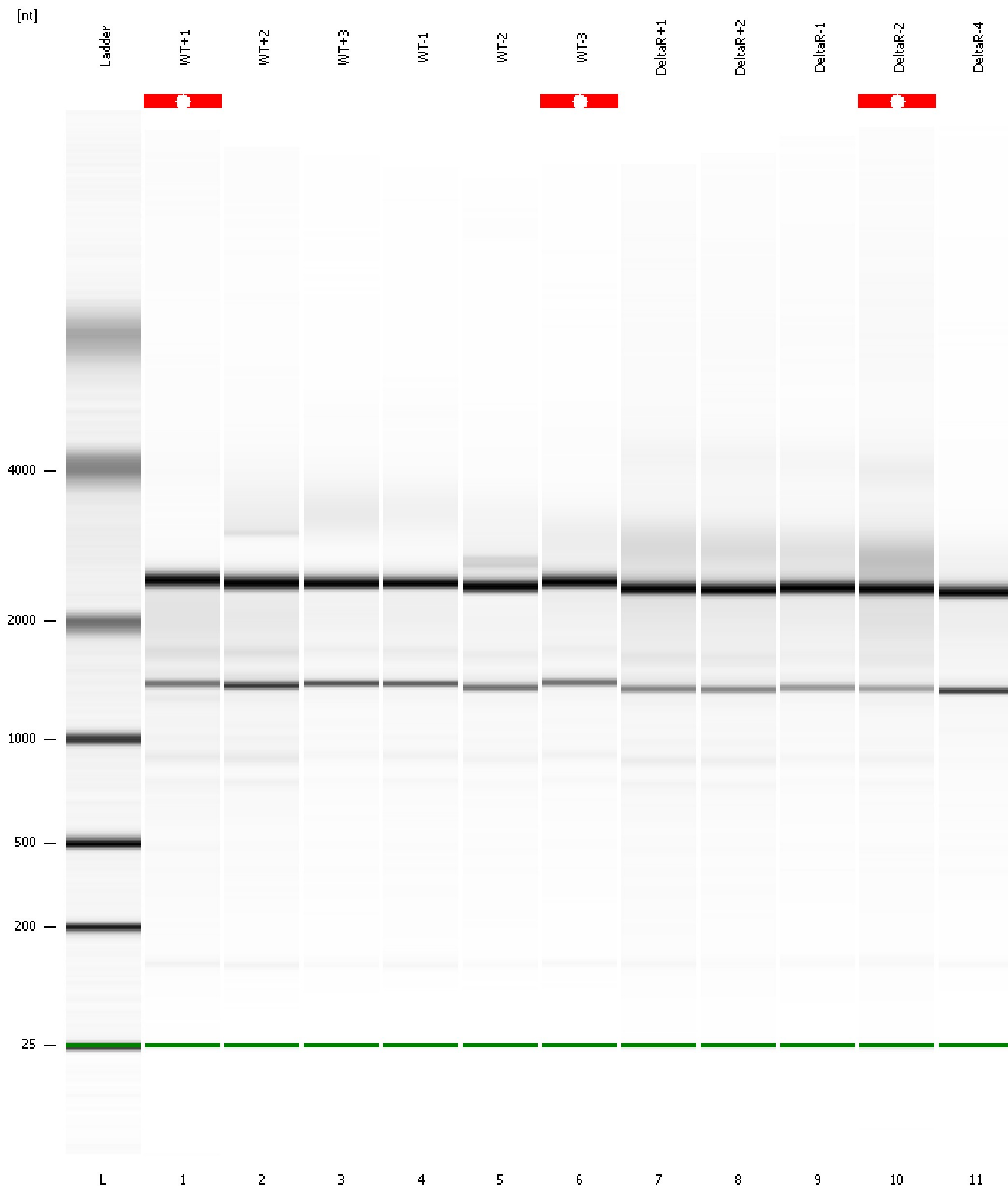
**Fragment table for sample 11 : DeltaR-4**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
16S	1,351	1,568	56.2	18.1
23S	2,183	3,297	116.4	37.4

Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Gel Image**



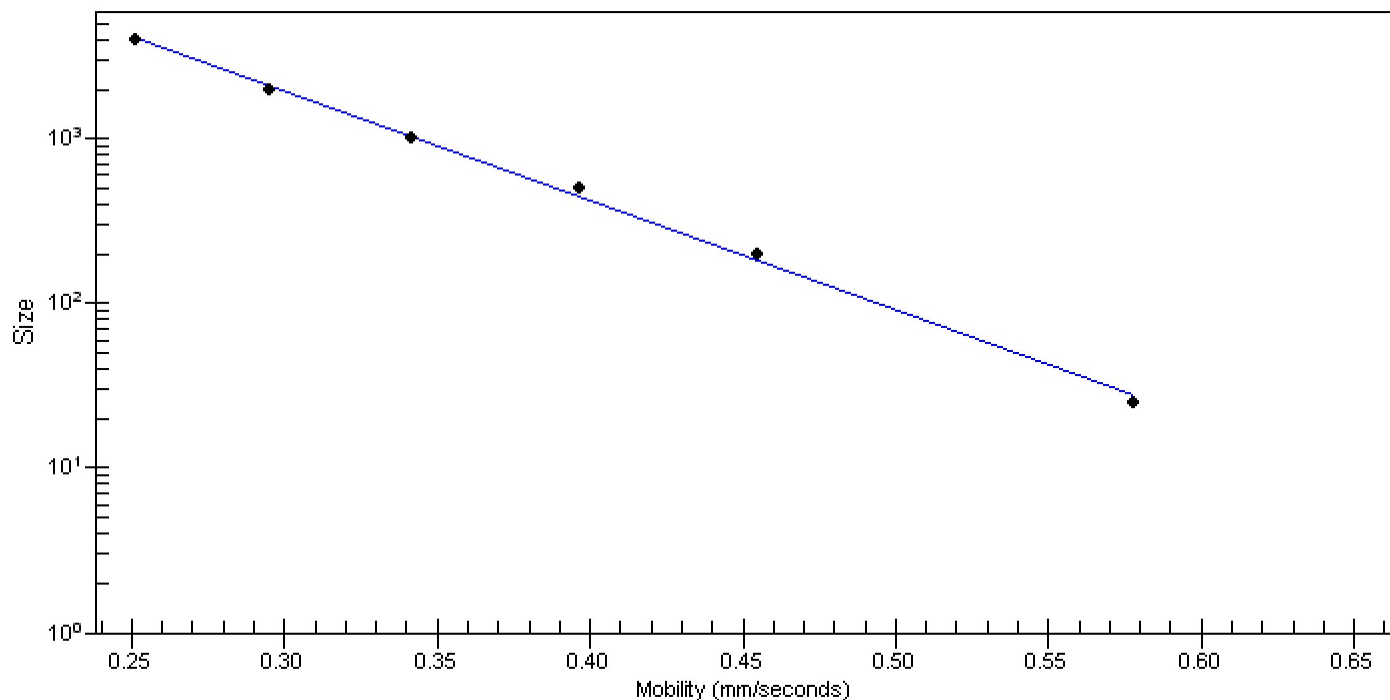


Assay Class: Prokaryote Total RNA Pico  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
Modified: 4/11/2016 10:58:00 AM

**Curves**

**Standard Curve**



Assay Class: Prokaryote Total RNA Pico  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-04-11\2016-04-11\_001.xad

Created: 4/11/2016 10:35:05 AM  
 Modified: 4/11/2016 10:58:00 AM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		4/11/2016 10:57:59 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-04-11\2016-04-11_001.xad)		Instrument	Run		4/11/2016 10:35:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/11/2016 10:35:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/11/2016 10:35:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/11/2016 10:35:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/11/2016 10:35:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/11/2016 10:35:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/11/2016 10:35:11 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1