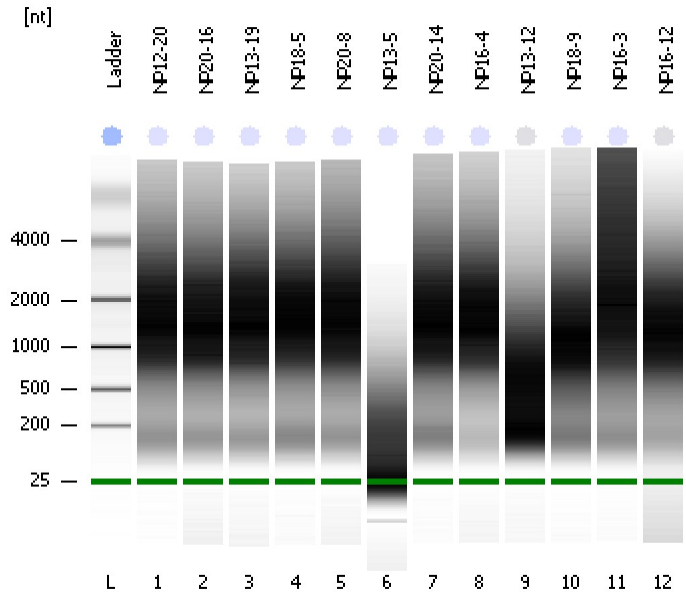


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

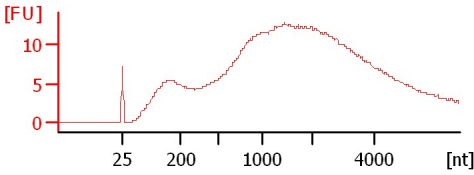
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA Nano Series II.xsy  
Assay Class: Eukaryote Total RNA Nano  
Version: 2.6  
Assay Comments: Total RNA Analysis ng sensitivity (Eukaryote)  
© Copyright 2003 - 2009 Agilent Technologies, Inc.

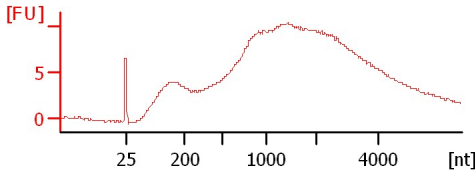
Chip Information:

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

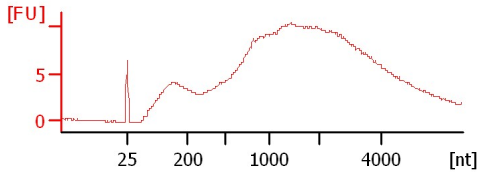
**NP12-20**  
RIN: 2.80



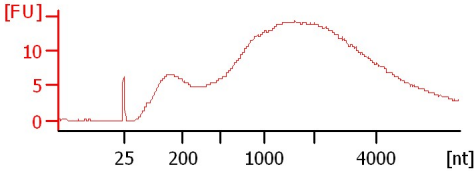
**NP20-16**  
RIN: 2.40



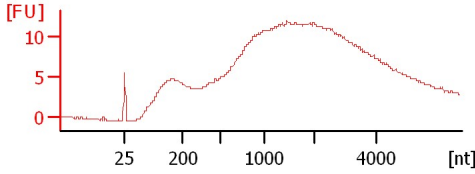
**NP13-19**  
RIN: 2.40



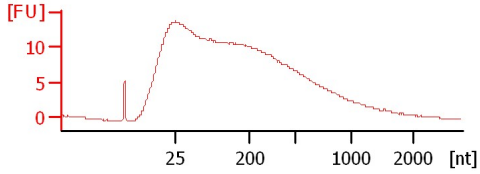
**NP18-5**  
RIN: 2.70



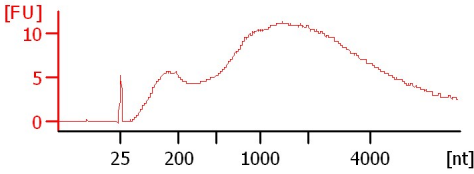
**NP20-8**  
RIN: 2.40



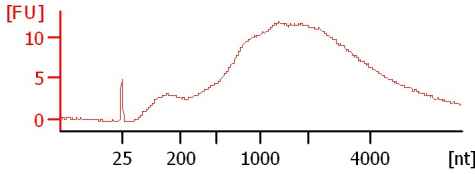
**NP13-5**  
RIN: 2.20



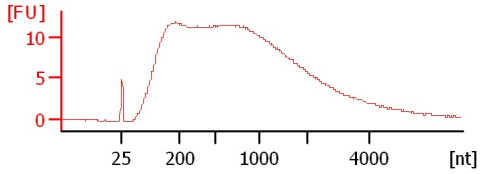
**NP20-14**  
RIN: 2.10



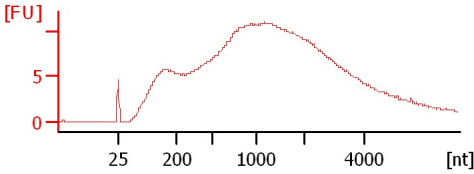
**NP16-4**  
RIN: 2.40



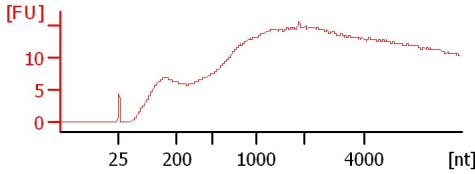
**NP13-12**  
RIN N/A



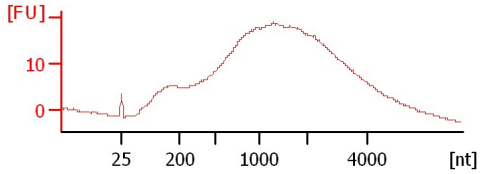
**NP18-9**  
RIN: 2.70



**NP16-3**  
RIN: 2.30



**NP16-12**  
RIN N/A



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
NP12-20		✓	RIN: 2.80	
NP20-16		✓	RIN: 2.40	
NP13-19		✓	RIN: 2.40	
NP18-5		✓	RIN: 2.70	
NP20-8		✓	RIN: 2.40	
NP13-5		✓	RIN: 2.20	
NP20-14		✓	RIN: 2.10	
NP16-4		✓	RIN: 2.40	
NP13-12		✓	RIN N/A	
NP18-9		✓	RIN: 2.70	
NP16-3		✓	RIN: 2.30	
NP16-12		✓	RIN N/A	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 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/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] : 19  
Integration End Time [s] : 69  
Slope Threshold : 0.6  
Height Threshold [FU] : 0.5  
Area Threshold : 0.2  
Width Threshold [s] : 0.5  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

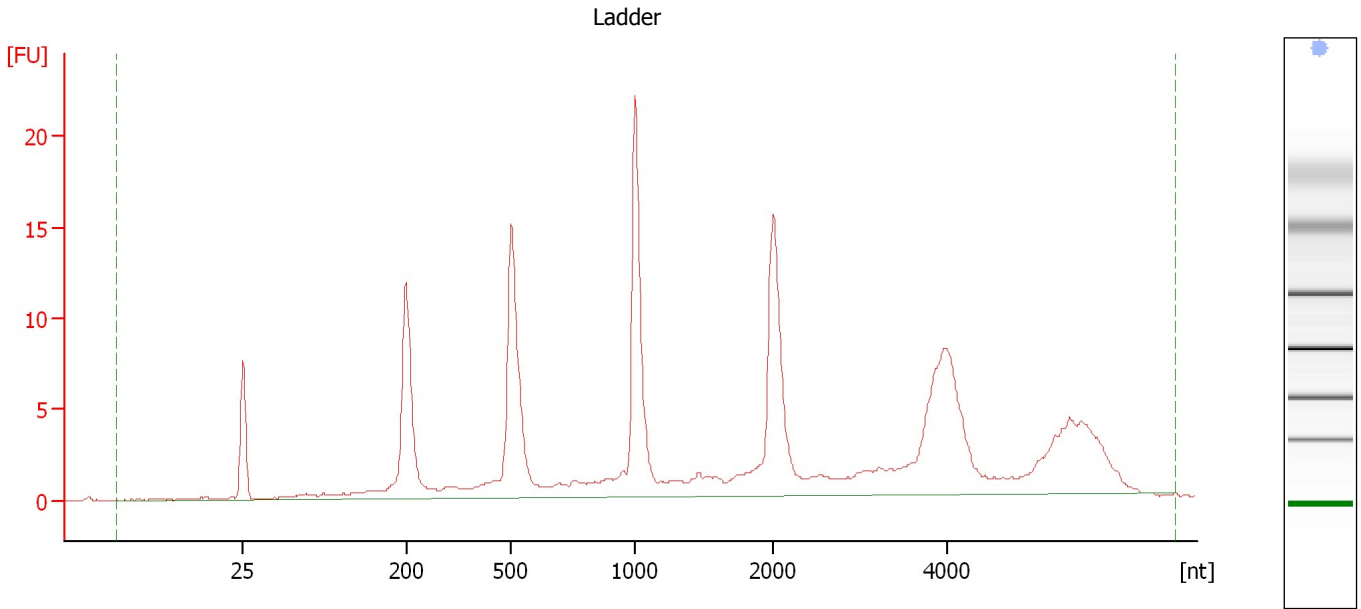
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary**



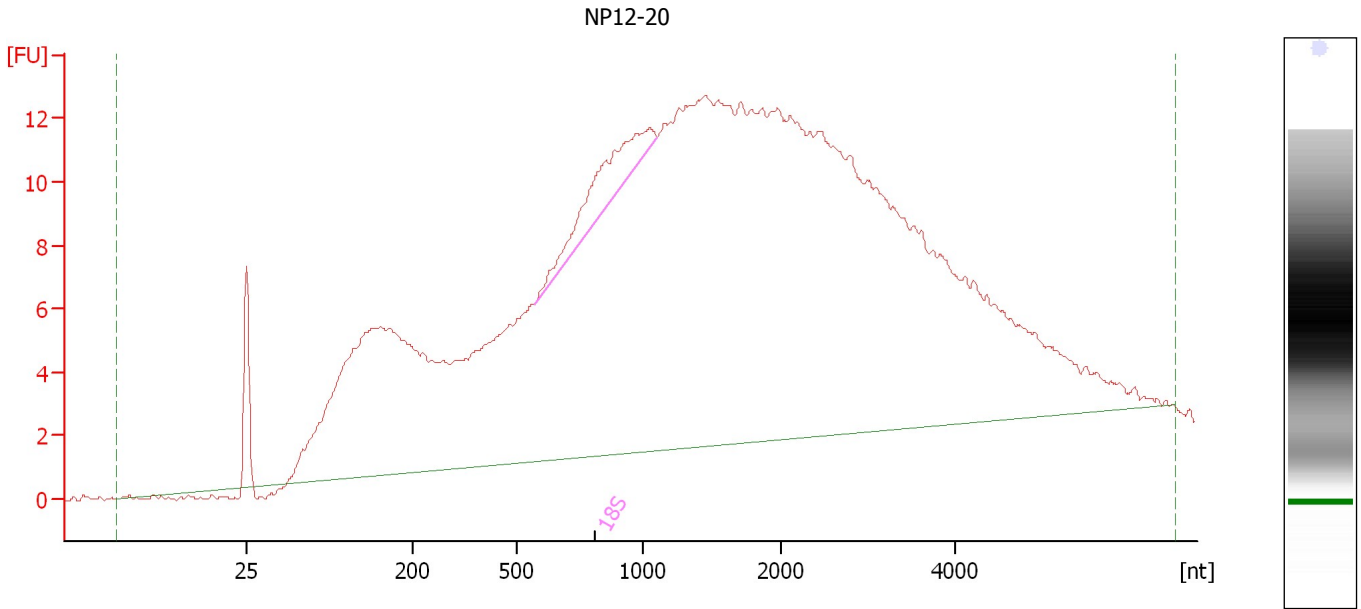
**Overall Results for Ladder**

RNA Area:	178.0	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/ $\mu$ l	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : NP12-20**

RNA Area:	510.9	RNA Integrity Number (RIN):	2.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	430 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.80

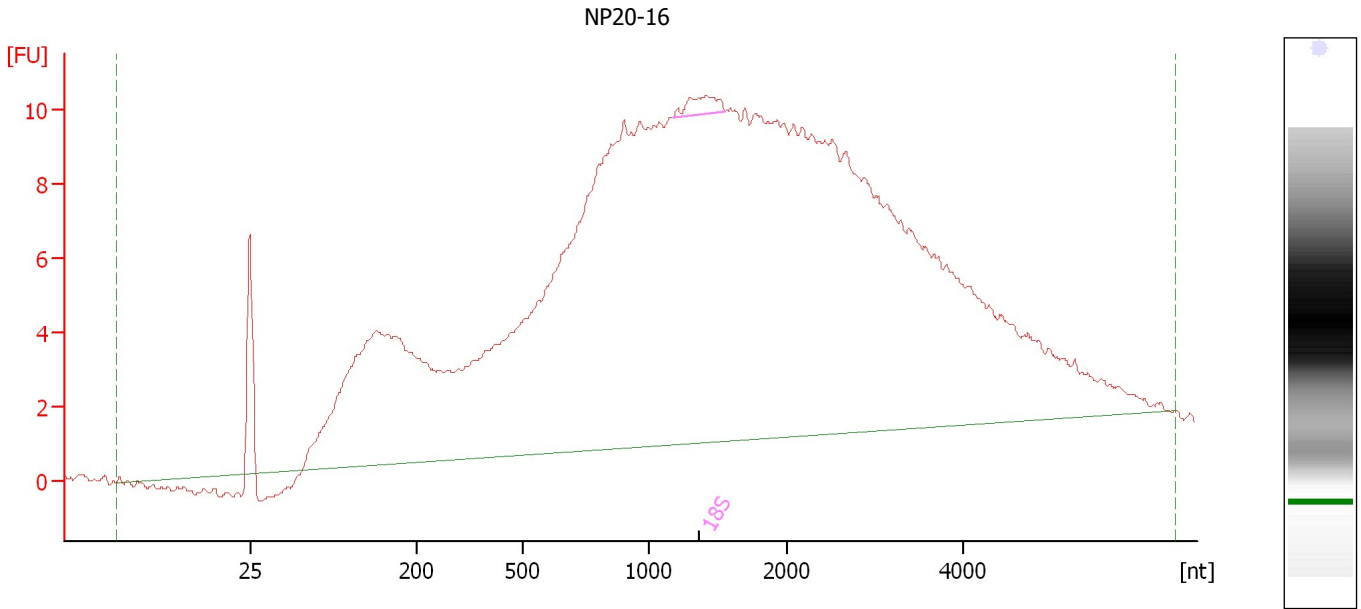
**Fragment table for sample 1 : NP12-20**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	568	1,100	10.9	2.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : NP20-16**

RNA Area:	415.2	RNA Integrity Number (RIN):	2.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	350 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.40

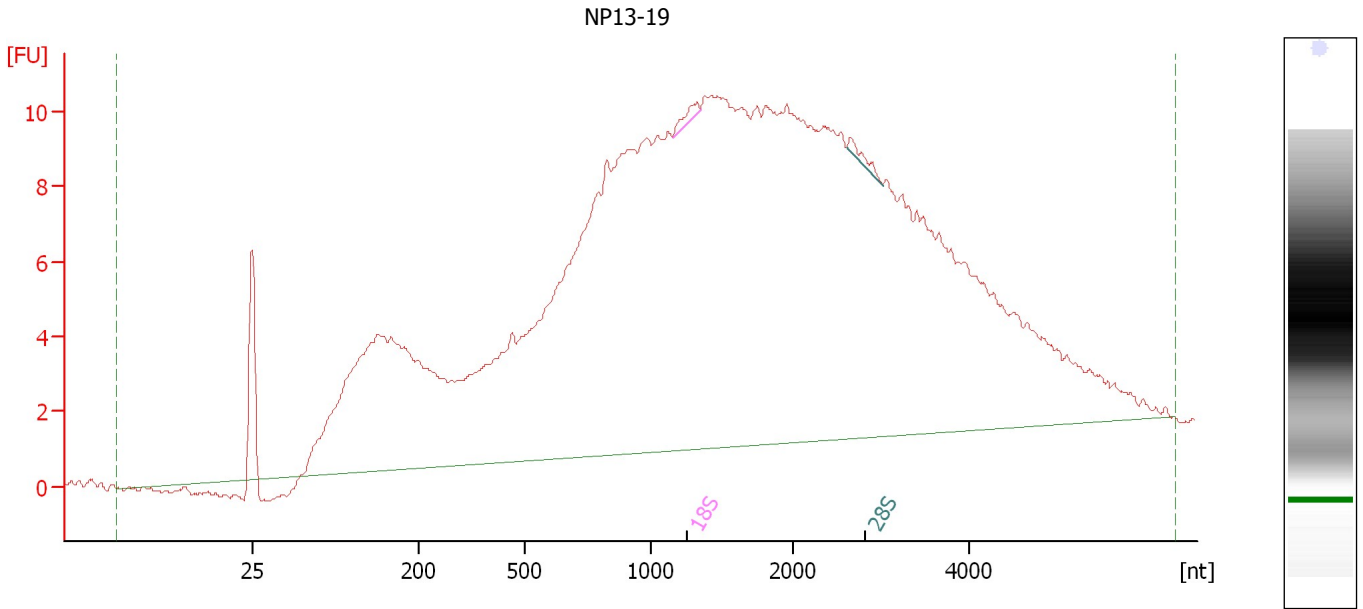
**Fragment table for sample 2 : NP20-16**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,175	1,550	1.7	0.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : NP13-19**

RNA Area:	419.2	RNA Integrity Number (RIN):	2.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	353 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	1.0	Result Flagging Label:	RIN: 2.40

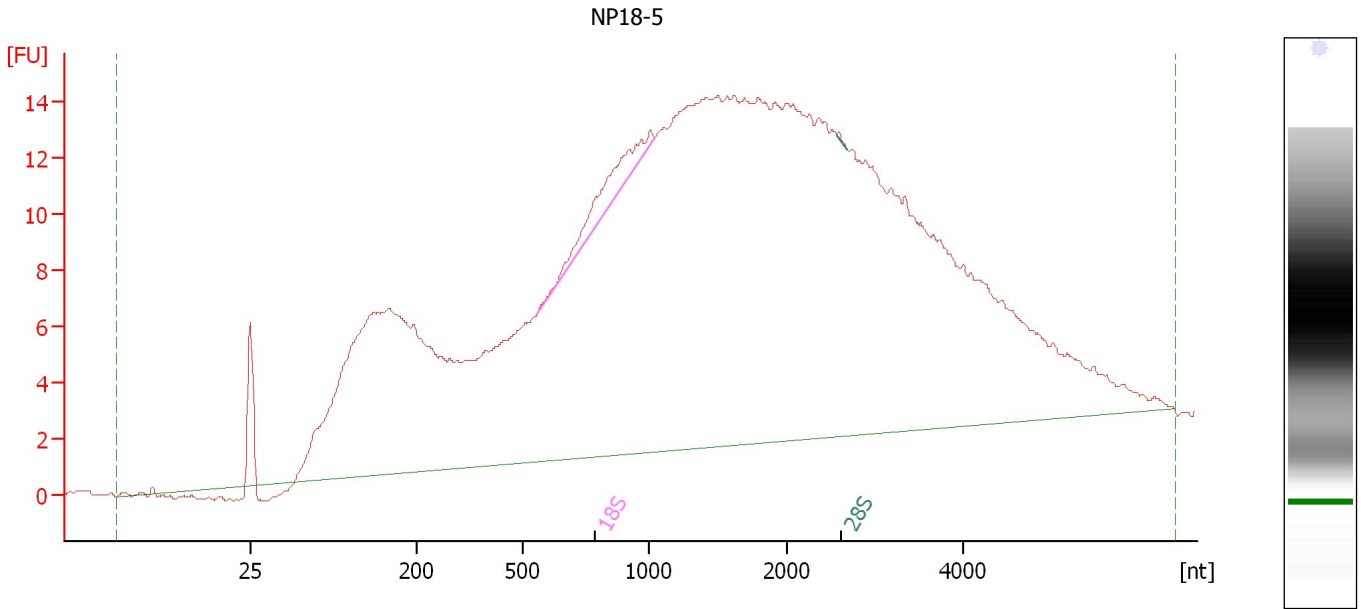
**Fragment table for sample 3 : NP13-19**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,148	1,345	0.6	0.1
28S	2,621	3,021	0.6	0.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : NP18-5**

RNA Area:	585.1	RNA Integrity Number (RIN):	2.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	493 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.70

**Fragment table for sample 4 : NP18-5**

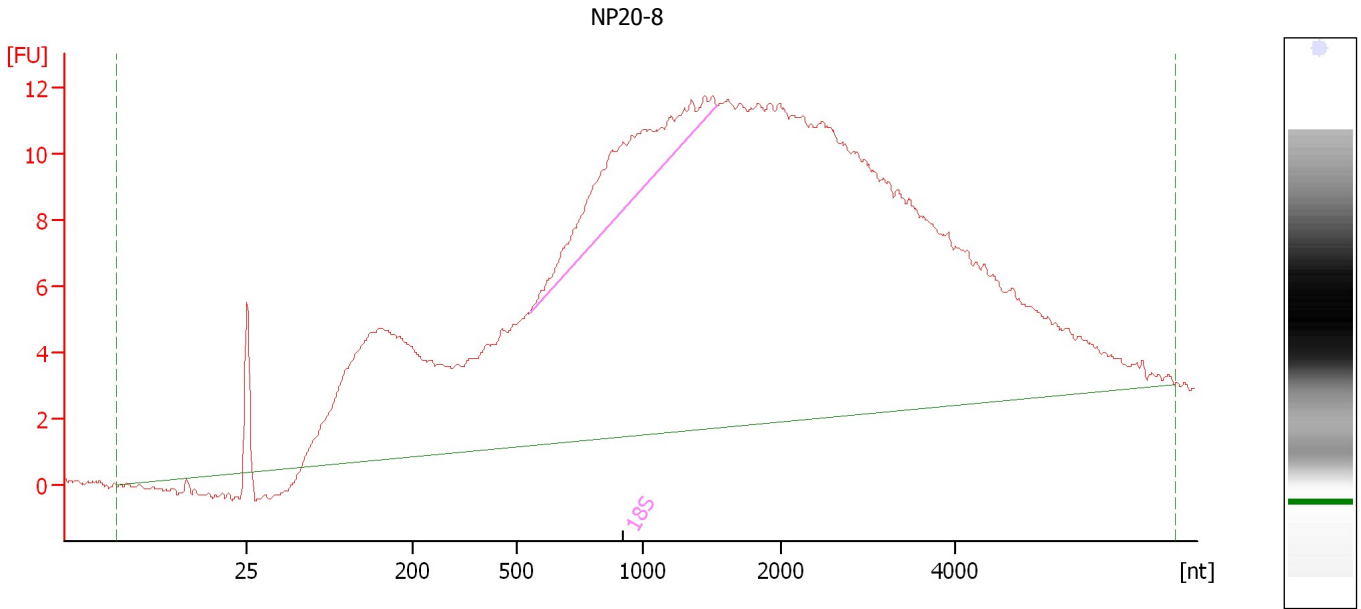
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	557	1,045	7.4	1.3
28S	2,550	2,683	0.1	0.0



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : NP20-8**

Width Threshold [s] : 0.01

**Overall Results for sample 5 : NP20-8**

RNA Area:	458.3	RNA Integrity Number (RIN):	2.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	386 ng/μl	Result Flagging Color:	<span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px; background-color: #ccccff;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 2.40

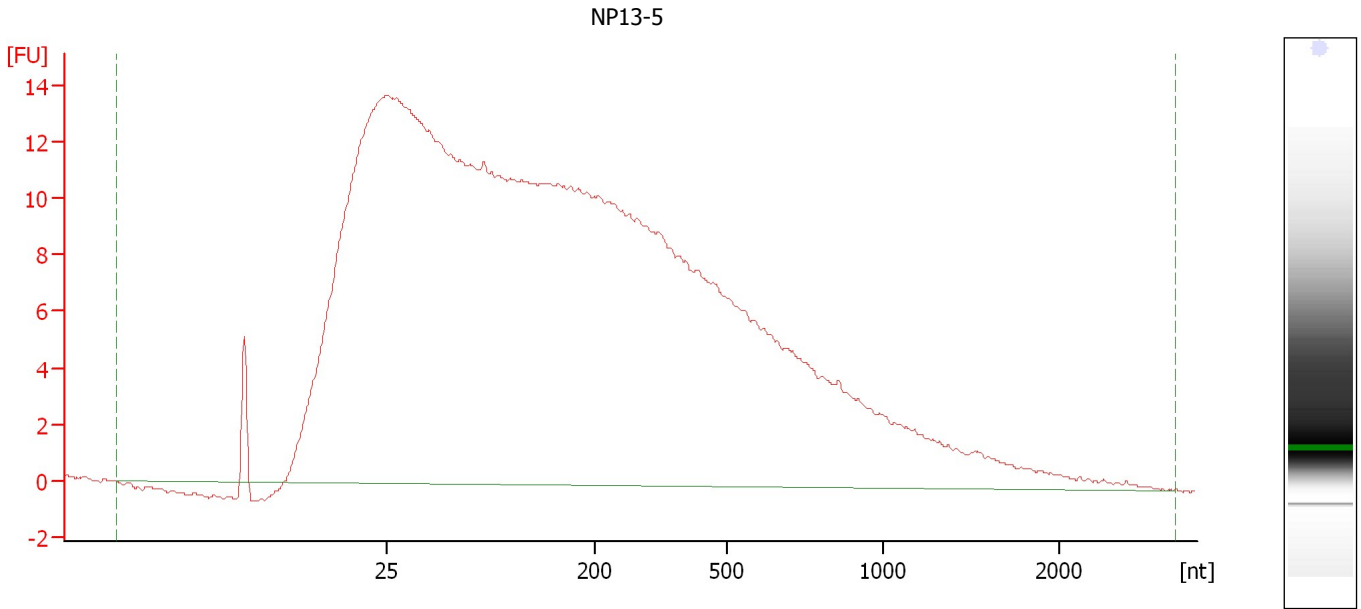
**Fragment table for sample 5 : NP20-8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	551	1,539	23.2	5.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : NP13-5**

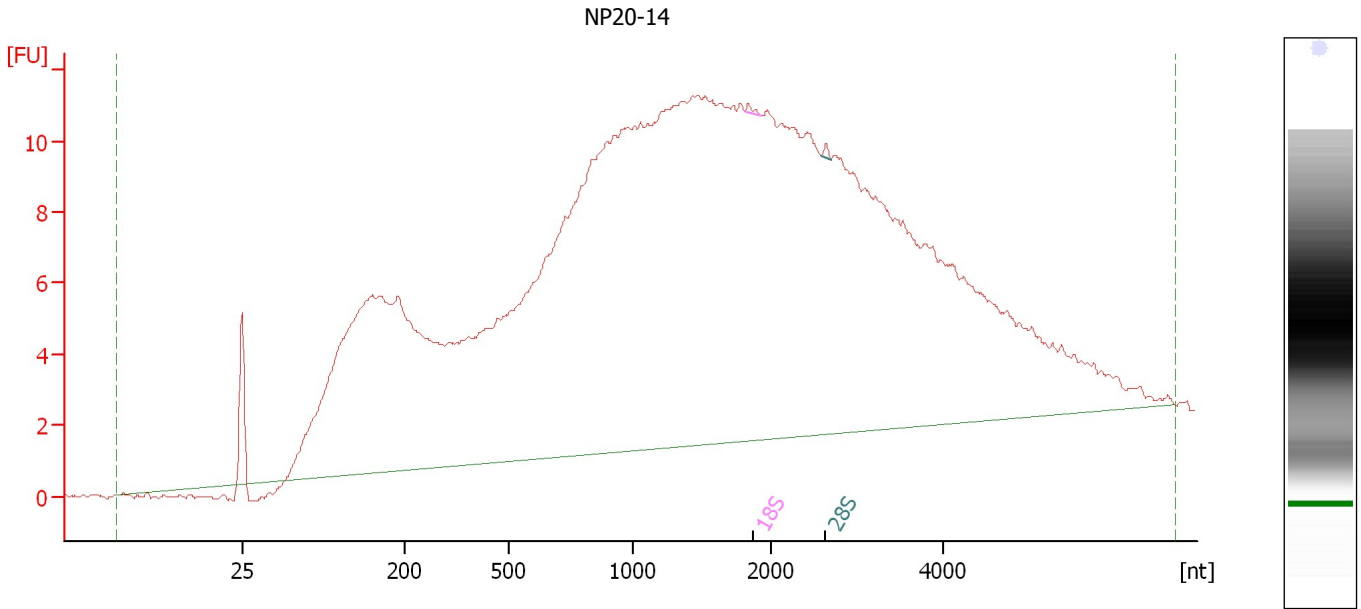
RNA Area: 477.5  
RNA Concentration: 402 ng/μl  
rRNA Ratio [28s / 18s]: 0.0

RNA Integrity Number (RIN): 2.2 (B.02.08, Anomaly Threshold(s) manually adapted)  
Result Flagging Color:   
Result Flagging Label: RIN: 2.20

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : NP20-14**

RNA Area:	477.5	RNA Integrity Number (RIN):	2.1 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	402 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.9	Result Flagging Label:	RIN: 2.10

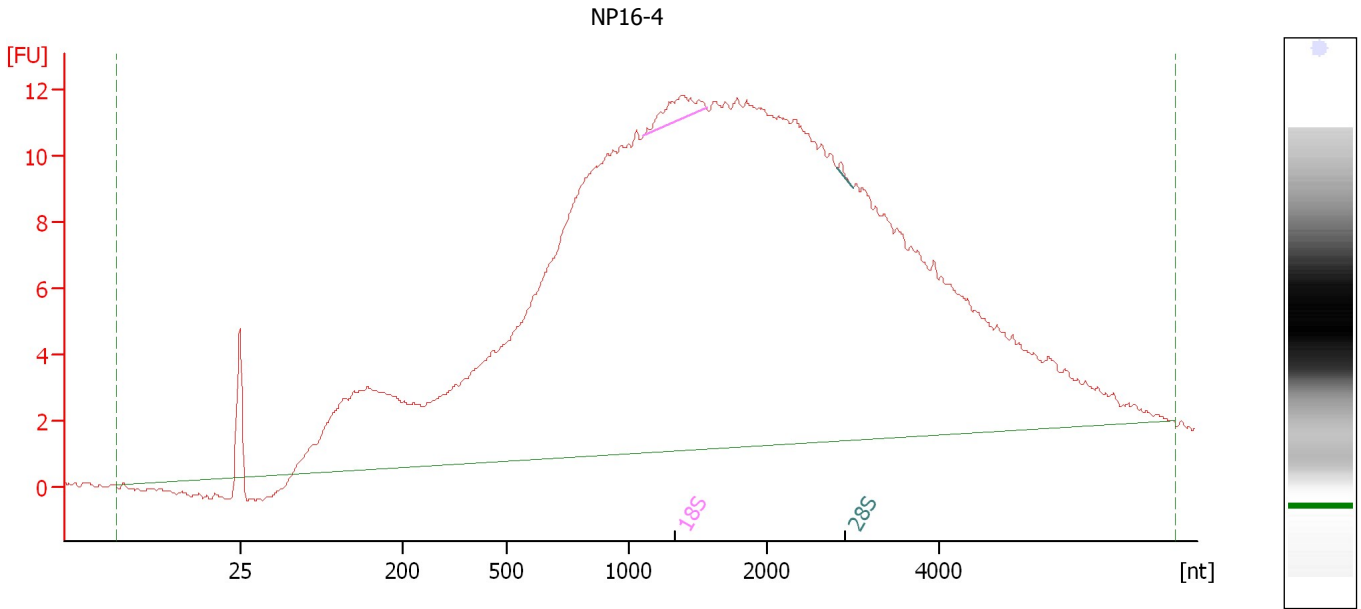
**Fragment table for sample 7 : NP20-14**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,807	1,929	0.2	0.0
28S	2,568	2,692	0.2	0.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 8 : NP16-4**

Width Threshold [s] : 0.01

**Overall Results for sample 8 : NP16-4**

RNA Area:	453.8	RNA Integrity Number (RIN):	2.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	382 ng/μl	Result Flagging Color:	<span style="border: 1px solid black; display: inline-block; width: 20px; height: 10px; background-color: #ccccff;"></span>
rRNA Ratio [28s / 18s]:	0.1	Result Flagging Label:	RIN: 2.40

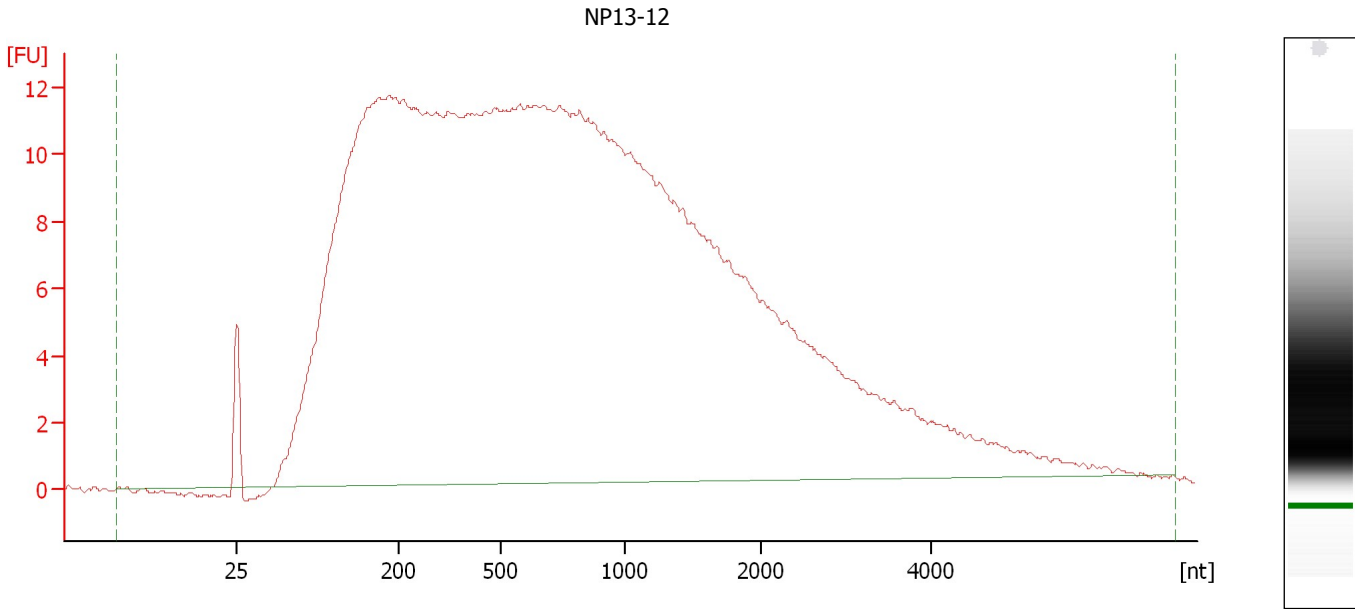
**Fragment table for sample 8 : NP16-4**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,102	1,562	2.8	0.6
28S	2,818	2,992	0.2	0.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 9 : NP13-12**

Width Threshold [s] : 0.01

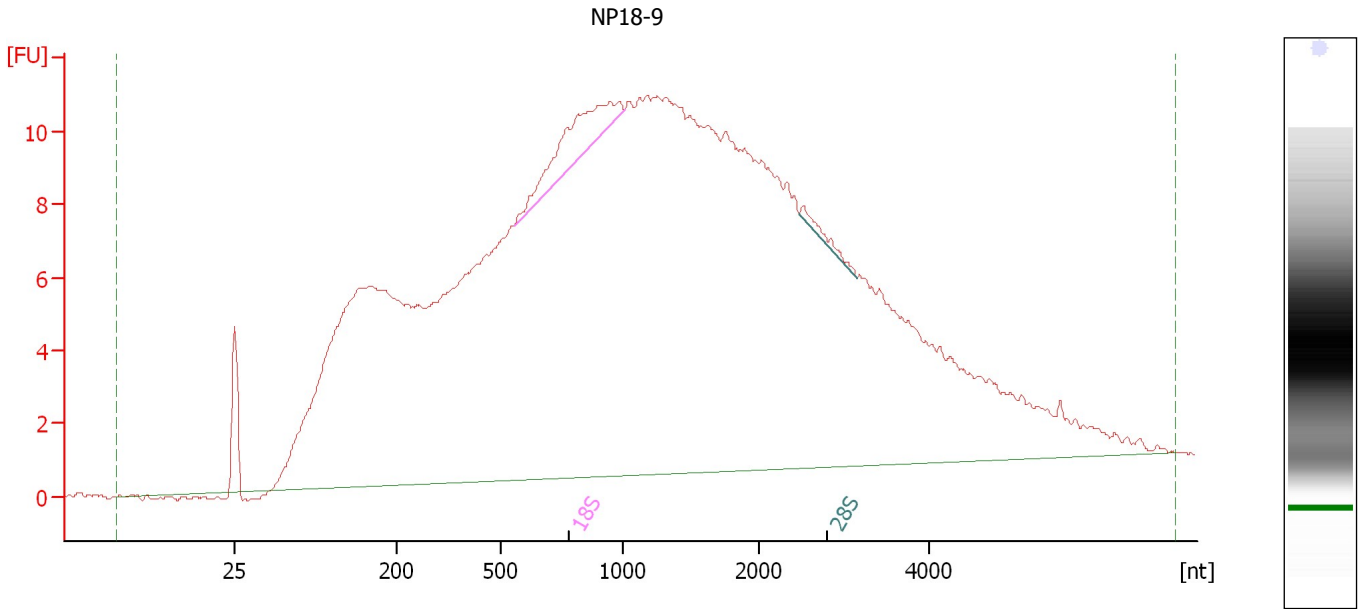
**Overall Results for sample 9 : NP13-12**

RNA Area:	610.2	Result Flagging Color:	<input type="checkbox"/>
RNA Concentration:	514 ng/μl	Result Flagging Label:	RIN N/A
rRNA Ratio [28s / 18s]:	0.0		

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : NP18-9**

RNA Area:	512.6	RNA Integrity Number (RIN):	2.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	432 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.1	Result Flagging Label:	RIN: 2.70

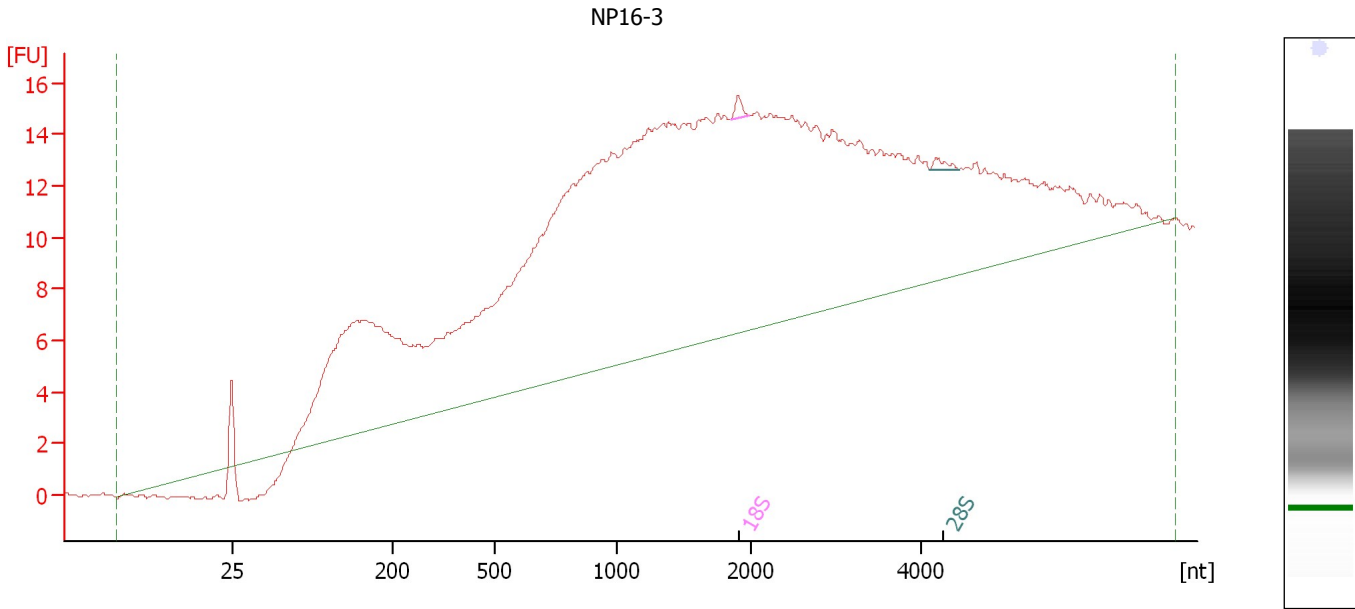
**Fragment table for sample 10 : NP18-9**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	558	1,017	8.3	1.6
28S	2,486	3,149	1.0	0.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : NP16-3**

RNA Area:	444.7	RNA Integrity Number (RIN):	2.3 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	375 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.8	Result Flagging Label:	RIN: 2.30

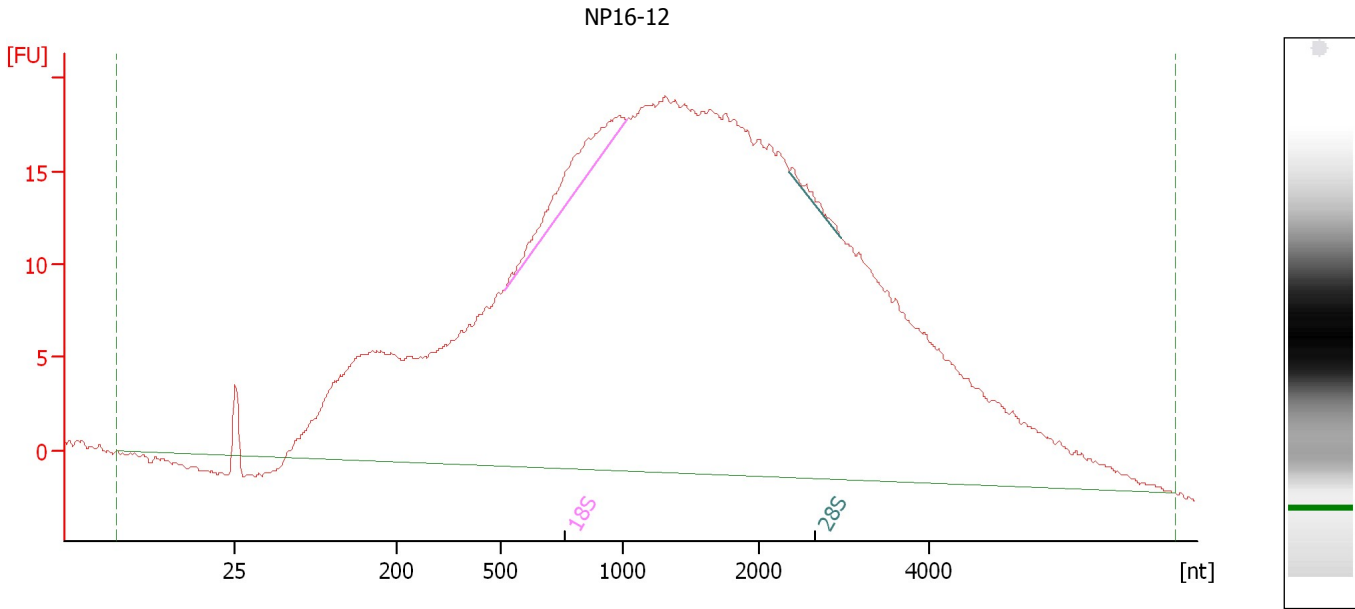
**Fragment table for sample 11 : NP16-3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,839	1,982	0.7	0.2
28S	4,087	4,440	0.6	0.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 12 : NP16-12**

Width Threshold [s] : 0.01

**Overall Results for sample 12 : NP16-12**

RNA Area: 888.3 Result Flagging Color:   
RNA Concentration: 748 ng/μl Result Flagging Label: RIN N/A  
rRNA Ratio [28s / 18s]: 0.1

**Fragment table for sample 12 : NP16-12**

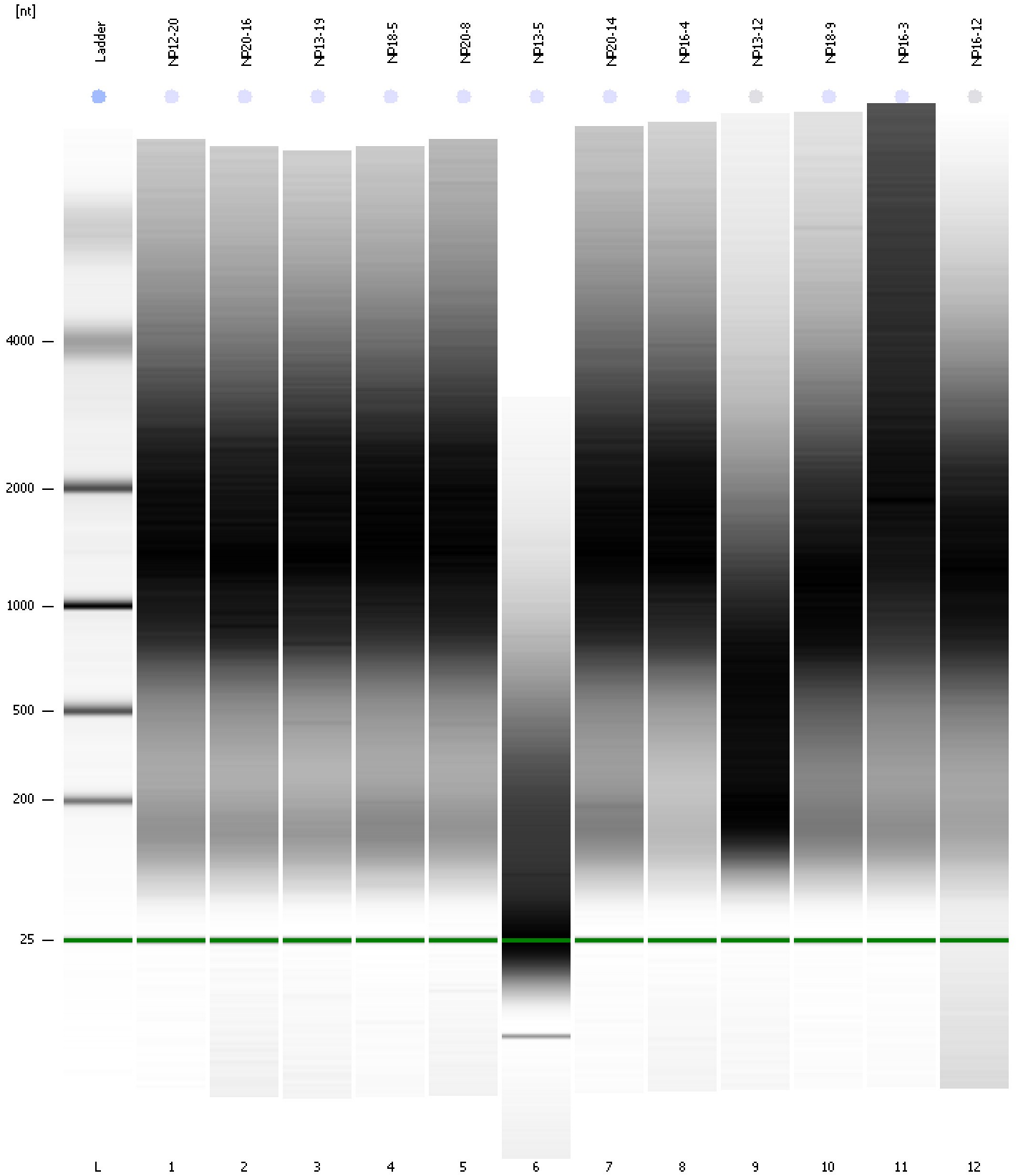
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	519	1,031	15.3	1.7
28S	2,360	2,961	1.4	0.2



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
Modified: 2/17/2012 1:42:15 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-02-17\2012-02-17\_005.xad

Created: 2/17/2012 1:17:07 PM  
 Modified: 2/17/2012 1:42:15 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		2/17/2012 1:40:56 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-02-17\2012-02-17_005.xad)		Instrument	Run		2/17/2012 1:17:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/17/2012 1:17:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/17/2012 1:17:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/17/2012 1:17:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/17/2012 1:17:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/17/2012 1:17:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/17/2012 1:17:13 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1