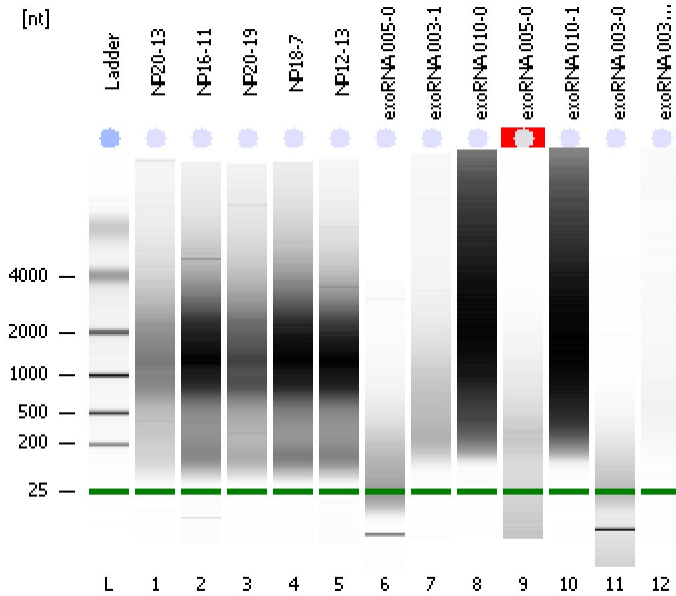


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

Electrophoresis File Run Summary



Instrument Information:

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

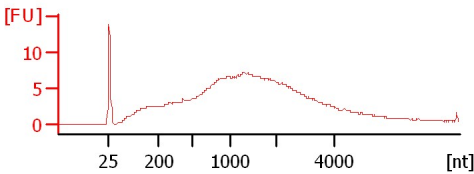
Assay Information:

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.

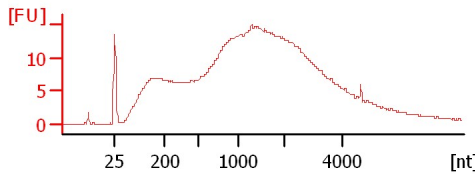
Chip Information:

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

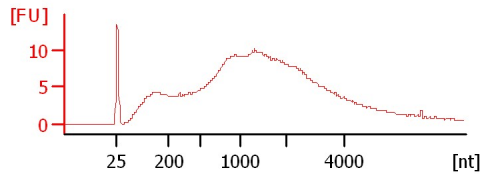
**NP20-13**  
RIN: 2.50



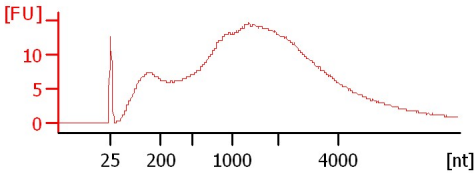
**NP16-11**  
RIN: 2.80



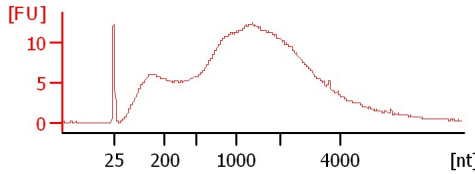
**NP20-19**  
RIN: 3.60



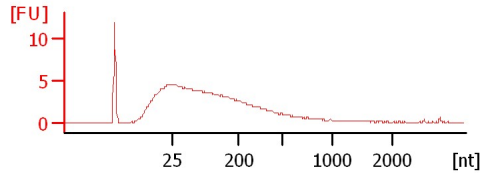
**NP18-7**  
RIN: 2.70



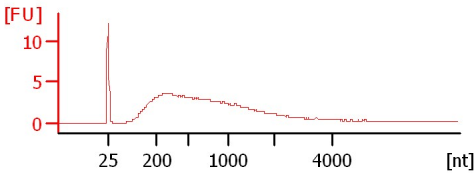
**NP12-13**  
RIN: 2.80



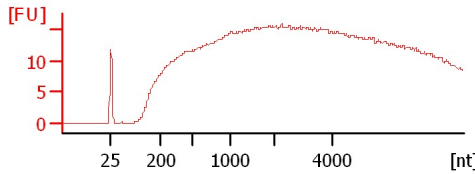
**exoRNA 005-0**  
RIN: 2.30



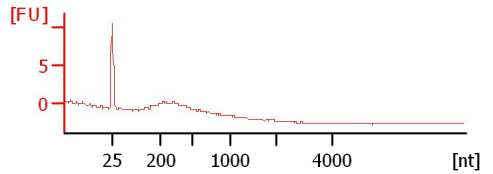
**exoRNA 003-1**  
RIN: 2.20



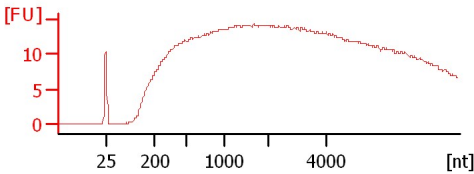
**exoRNA 010-0**  
RIN: 2.40



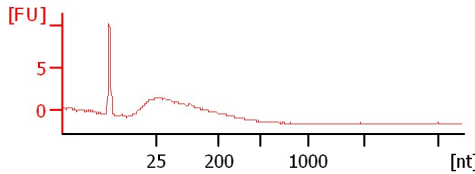
**exoRNA 005-0**  
RIN N/A



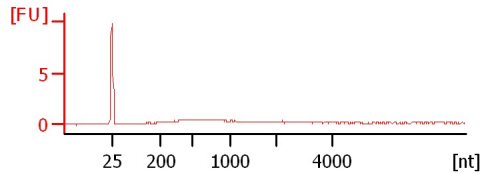
**exoRNA 010-1**  
RIN: 2.20



**exoRNA 003-0**  
RIN: 2.80



**exoRNA 003-1 (2)**  
RIN: 1



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
NP20-13		✓	RIN: 2.50	
NP16-11		✓	RIN: 2.80	
NP20-19		✓	RIN: 3.60	
NP18-7		✓	RIN: 2.70	
NP12-13		✓	RIN: 2.80	
exoRNA 005-0		✓	RIN: 2.30	
exoRNA 003-1		✓	RIN: 2.20	
exoRNA 010-0		✓	RIN: 2.40	
exoRNA 005-0		✓	RIN N/A	
exoRNA 010-1		✓	RIN: 2.20	
exoRNA 003-0		✓	RIN: 2.80	
exoRNA 003-1 (2)		✓	RIN:1	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 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/ $\mu$ l] : 150  
Lower Marker Concentration [ng/ $\mu$ l] : 0  
Upper Marker Concentration [ng/ $\mu$ l] : 0  
Used Lower Marker for Quantitation  
Standard Curve Fit is Logarithmic  
Show Data Aligned to Lower Marker

### Integrator Settings

Integration Start Time [s] : 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

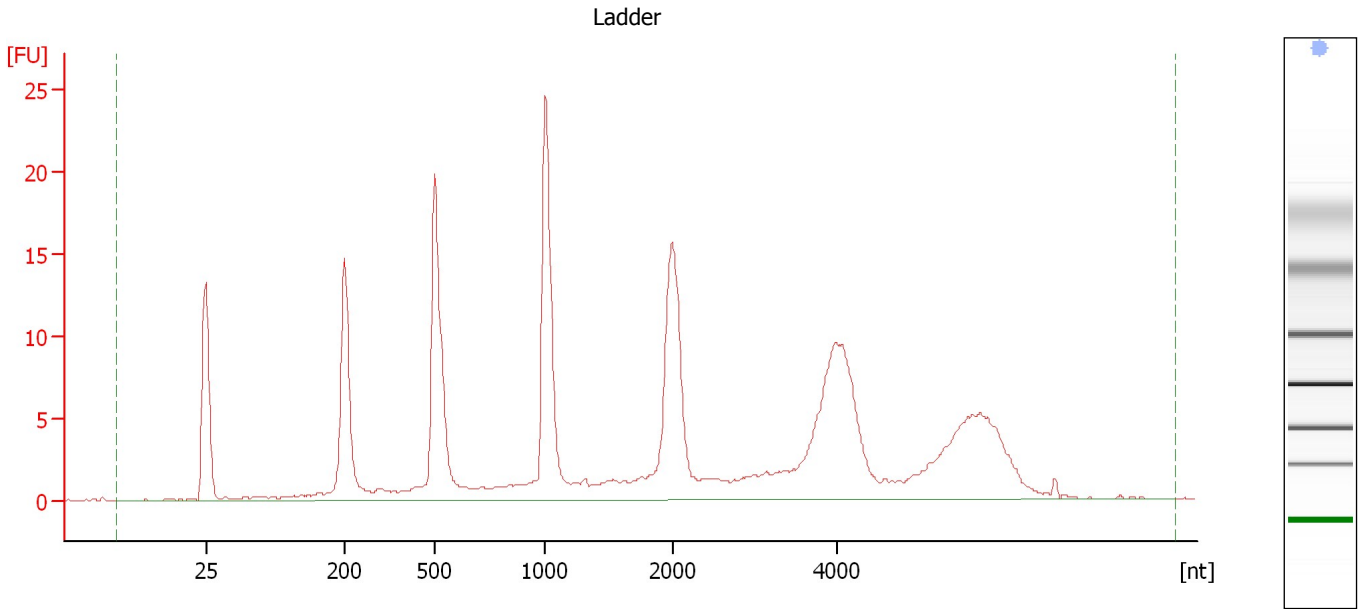
### Ladder

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\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary**



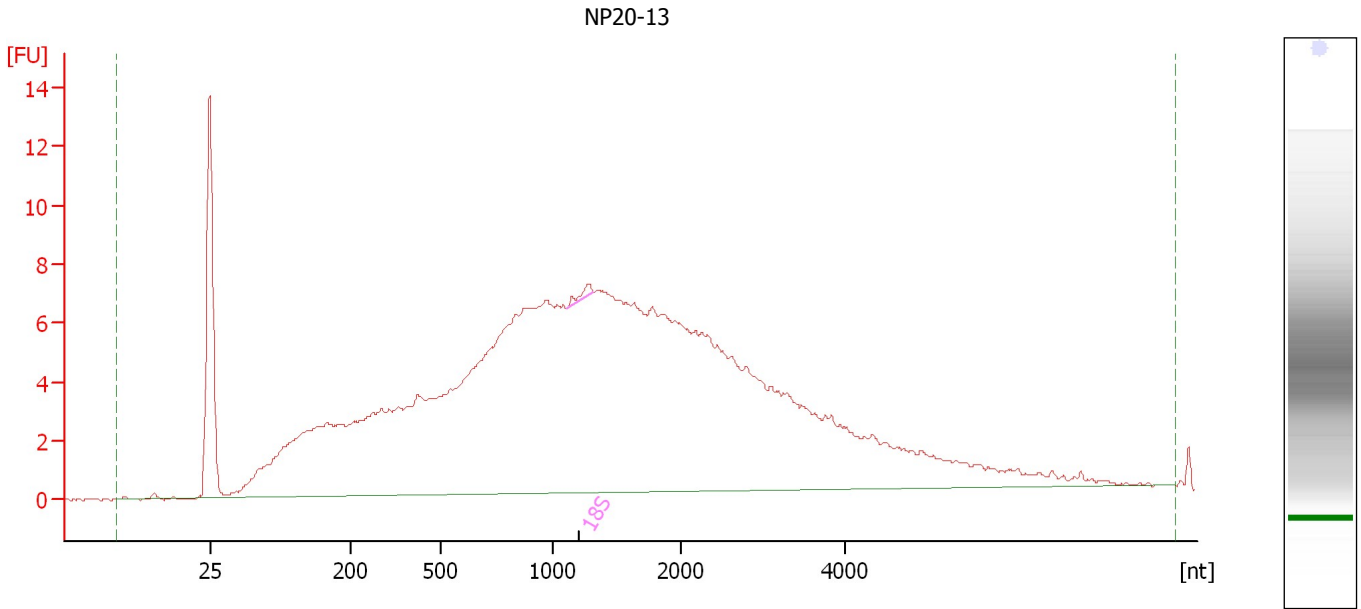
**Overall Results for Ladder**

RNA Area:	229.3	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\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : NP20-13**

RNA Area:	307.8	RNA Integrity Number (RIN):	2.5 (B.02.08)
RNA Concentration:	201 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: 2.50

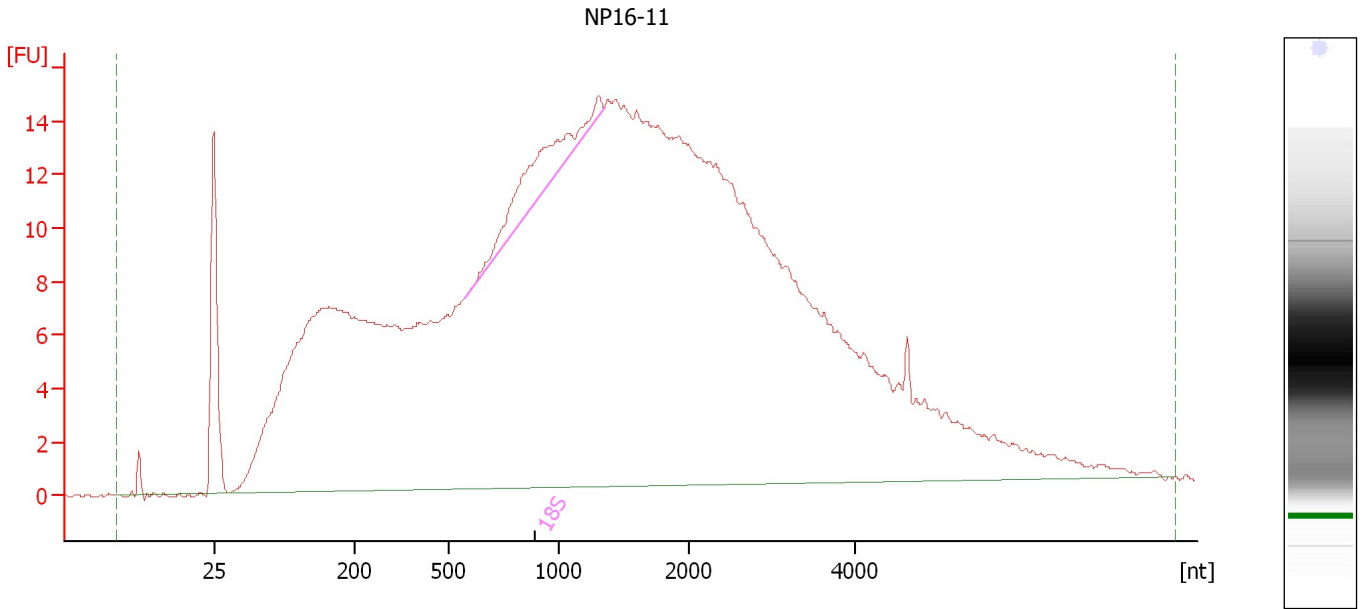
**Fragment table for sample 1 : NP20-13**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,110	1,319	0.6	0.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : NP16-11**

RNA Area:	683.7	RNA Integrity Number (RIN):	2.8 (B.02.08)
RNA Concentration:	447 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

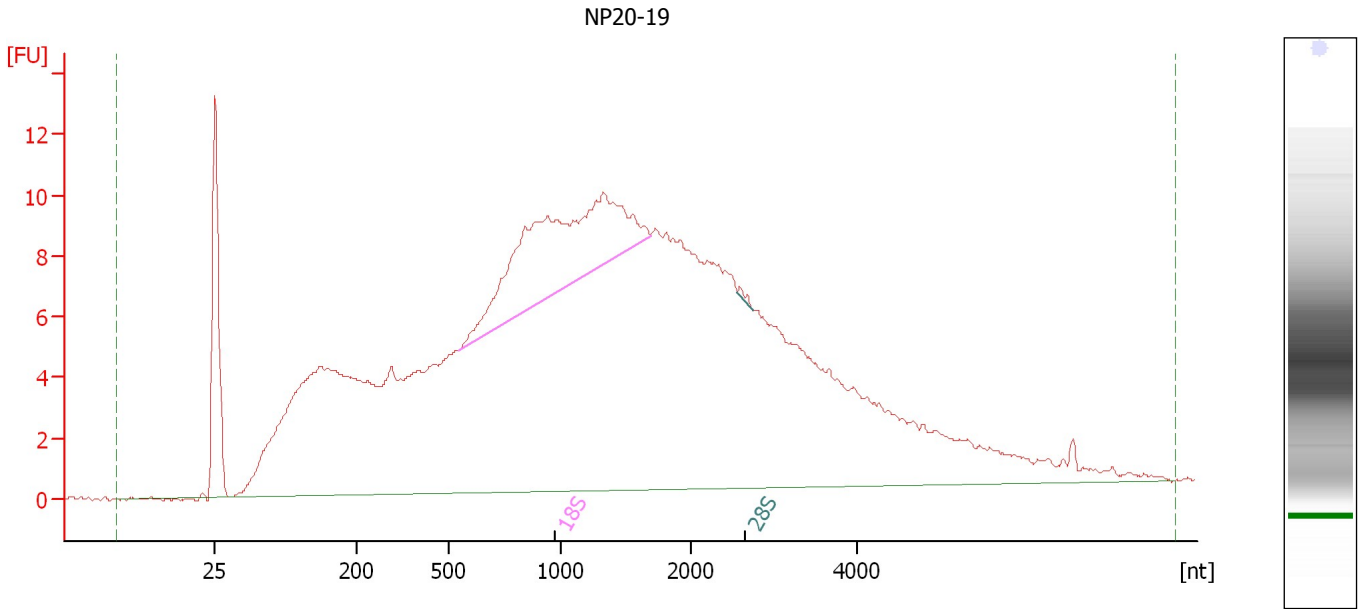
**Fragment table for sample 2 : NP16-11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	578	1,343	13.6	2.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : NP20-19**

RNA Area:	442.4	RNA Integrity Number (RIN):	3.6 (B.02.08)
RNA Concentration:	289 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: 3.60

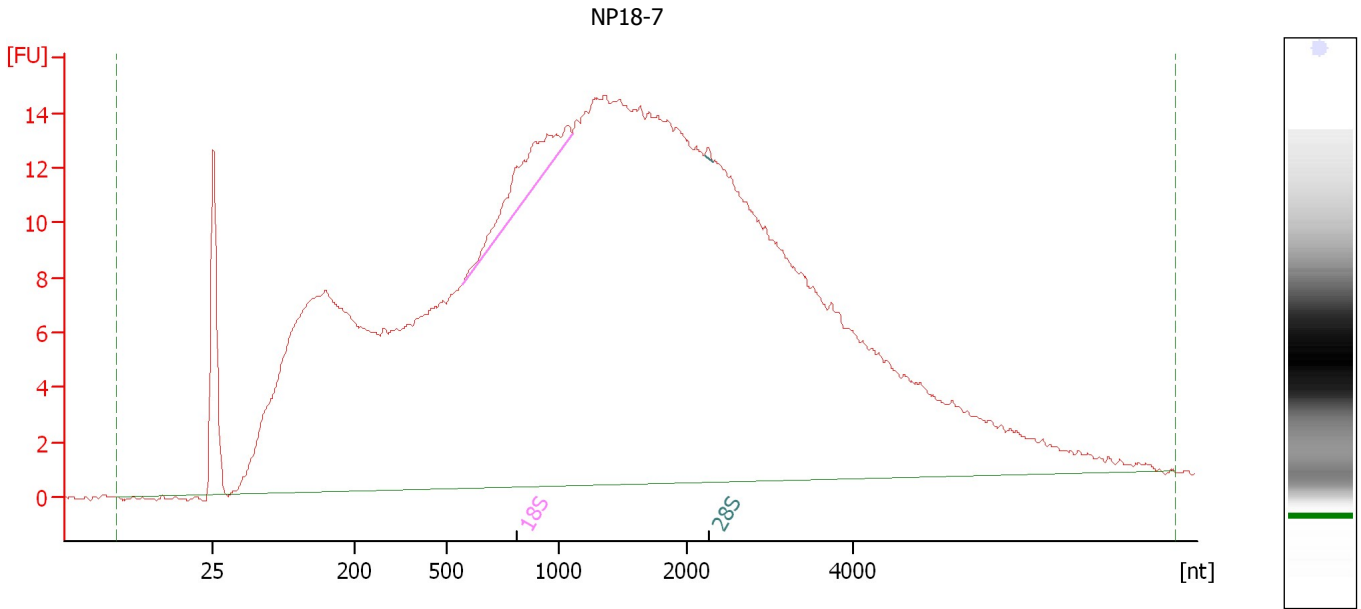
**Fragment table for sample 3 : NP20-19**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	537	1,684	35.8	8.1
28S	2,560	2,739	0.2	0.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : NP18-7**

RNA Area: 695.5                      RNA Integrity Number (RIN): 2.7 (B.02.08)  
RNA Concentration: 455 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.0                      Result Flagging Label: RIN: 2.70

**Fragment table for sample 4 : NP18-7**

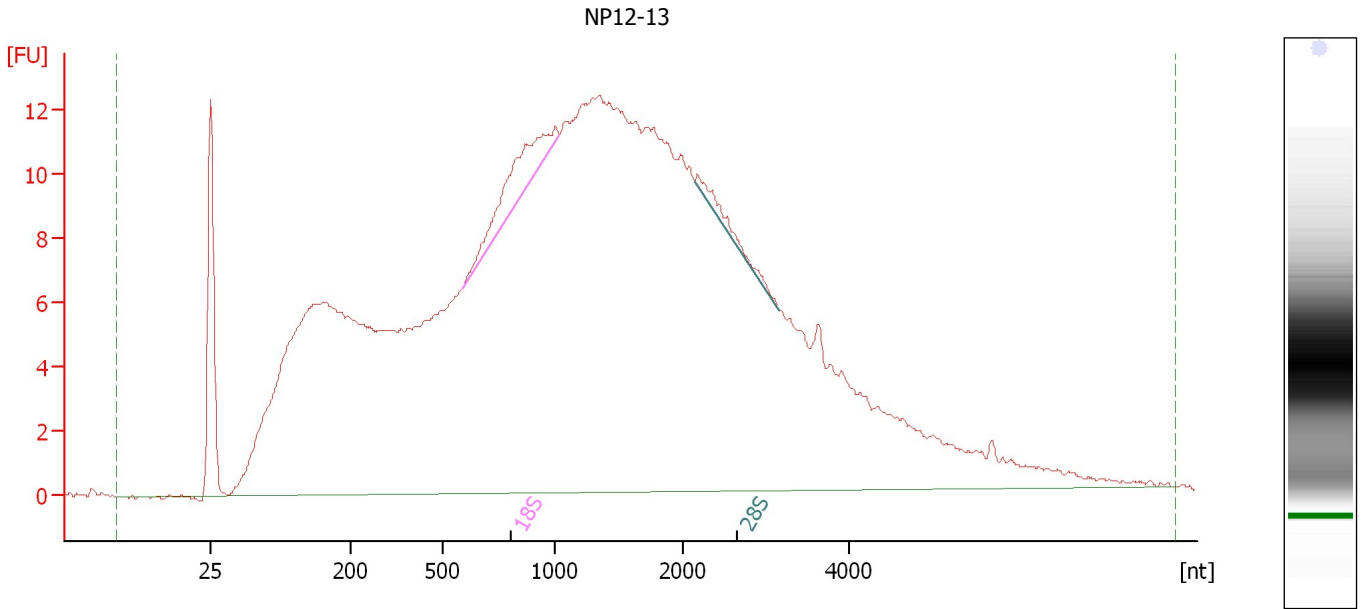
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	575	1,110	10.6	1.5
28S	2,212	2,303	0.2	0.0



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : NP12-13**

RNA Area:	565.3	RNA Integrity Number (RIN):	2.8 (B.02.08)
RNA Concentration:	370 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]:	0.3	Result Flagging Label:	RIN: 2.80

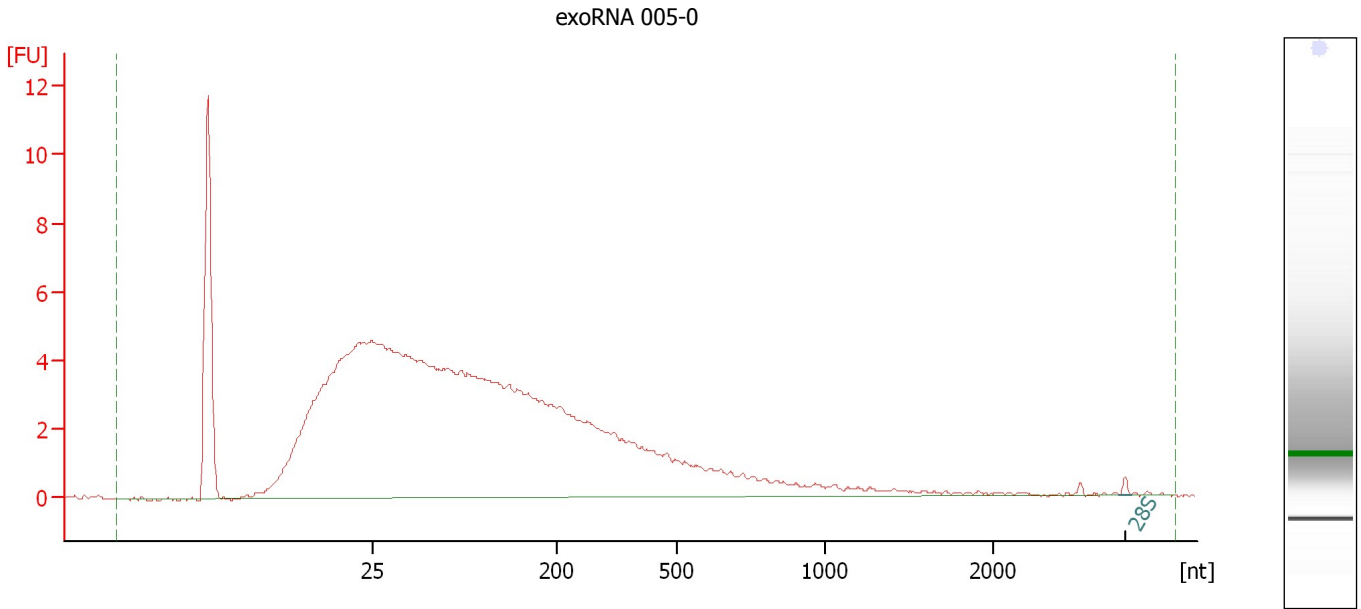
**Fragment table for sample 5 : NP12-13**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	589	1,038	8.7	1.5
28S	2,134	3,156	2.3	0.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : exoRNA 005-0**

RNA Area:	73.7	RNA Integrity Number (RIN):	2.3 (B.02.08)
RNA Concentration:	48 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: 2.30

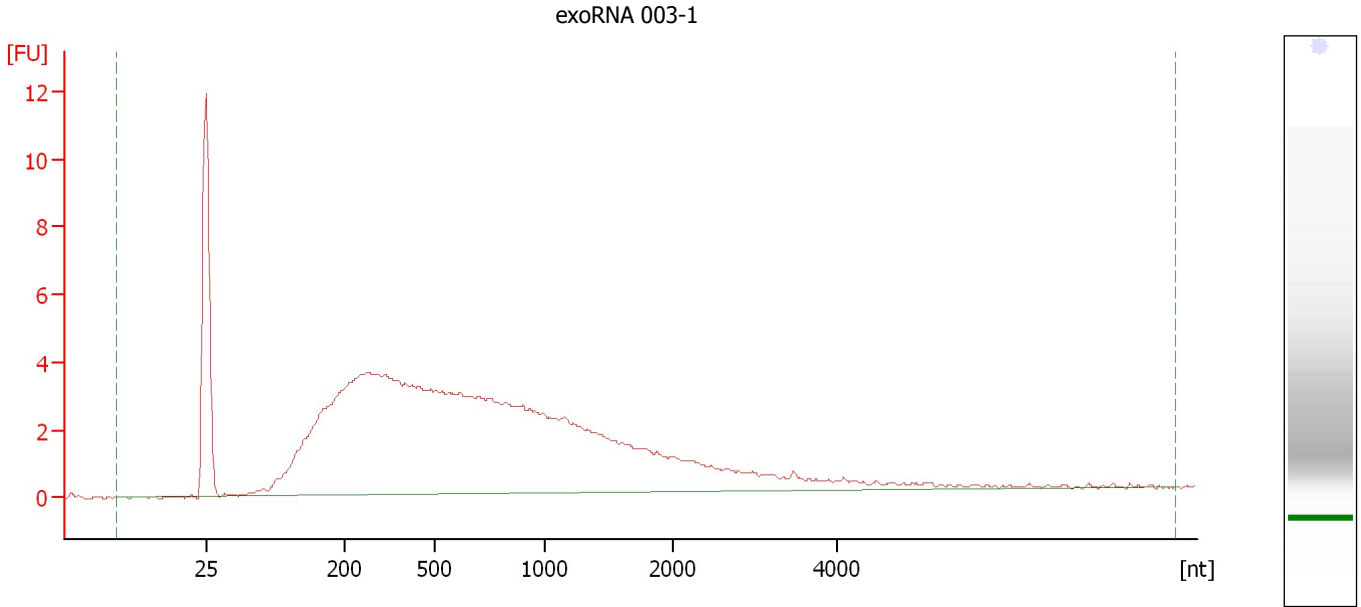
**Fragment table for sample 6 : exoRNA 005-0**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
28S	3,158	3,276	0.2	0.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



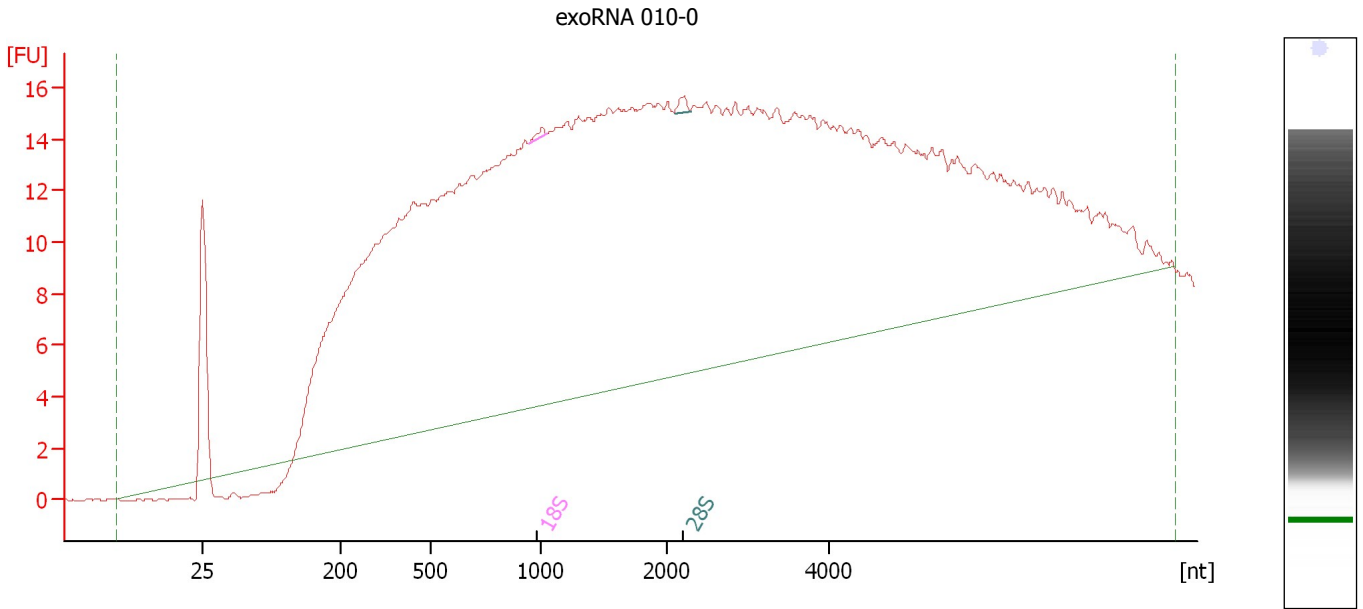
**Overall Results for sample 7 : exoRNA 003-1**

RNA Area:	140.0	RNA Integrity Number (RIN):	2.2 (B.02.08)
RNA Concentration:	92 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: 2.20

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
 Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : exoRNA 010-0**

RNA Area:	691.2	RNA Integrity Number (RIN):	2.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	452 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]:	1.5	Result Flagging Label:	RIN: 2.40

**Fragment table for sample 8 : exoRNA 010-0**

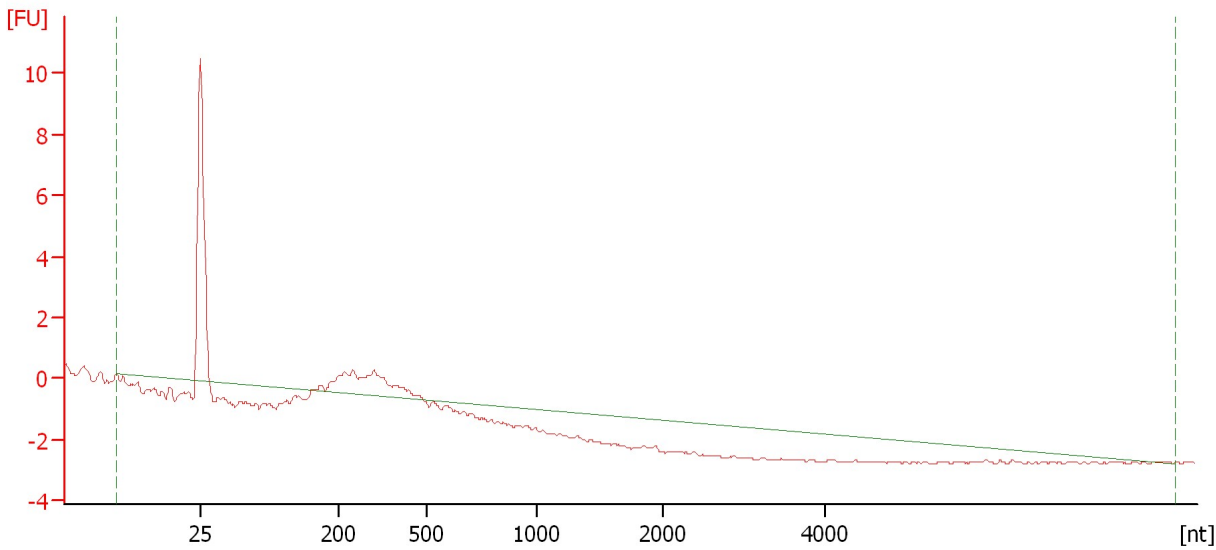
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	951	1,059	0.4	0.1
28S	2,102	2,299	0.6	0.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**

exoRNA 005-0



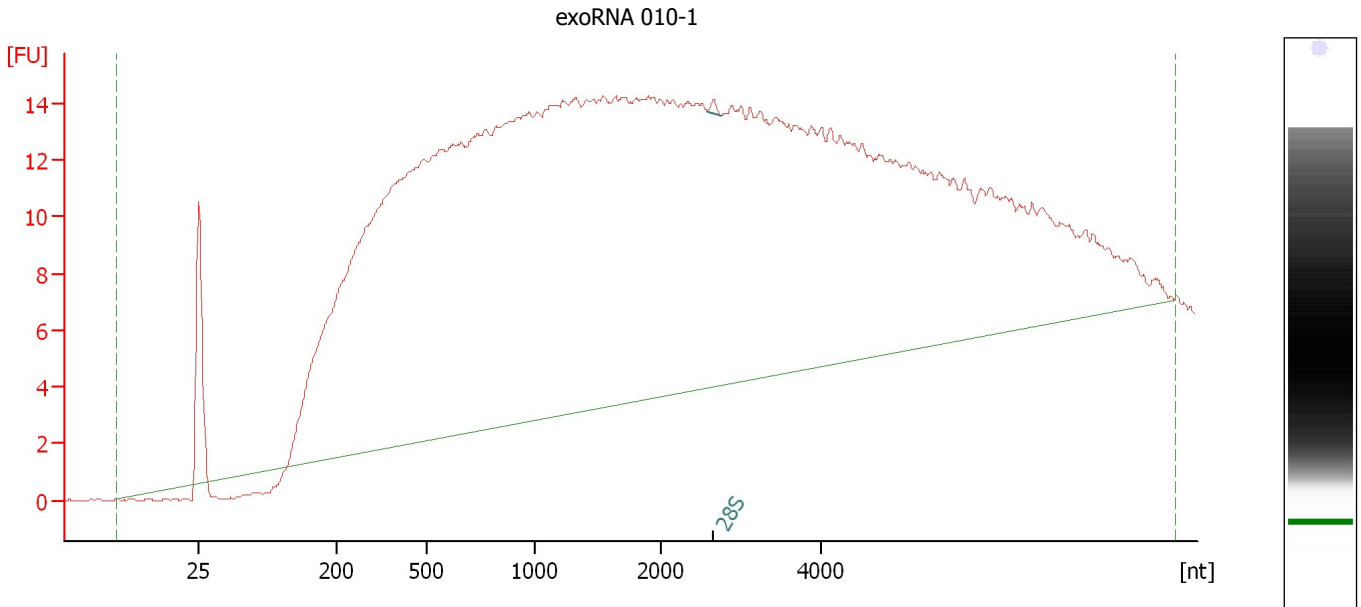
**Overall Results for sample 9 : exoRNA 005-0**

RNA Area:	6.5	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	4 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN N/A

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : exoRNA 010-1**

RNA Area:	706.5	RNA Integrity Number (RIN):	2.2 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	462 ng/μl		
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
		Result Flagging Label:	RIN: 2.20

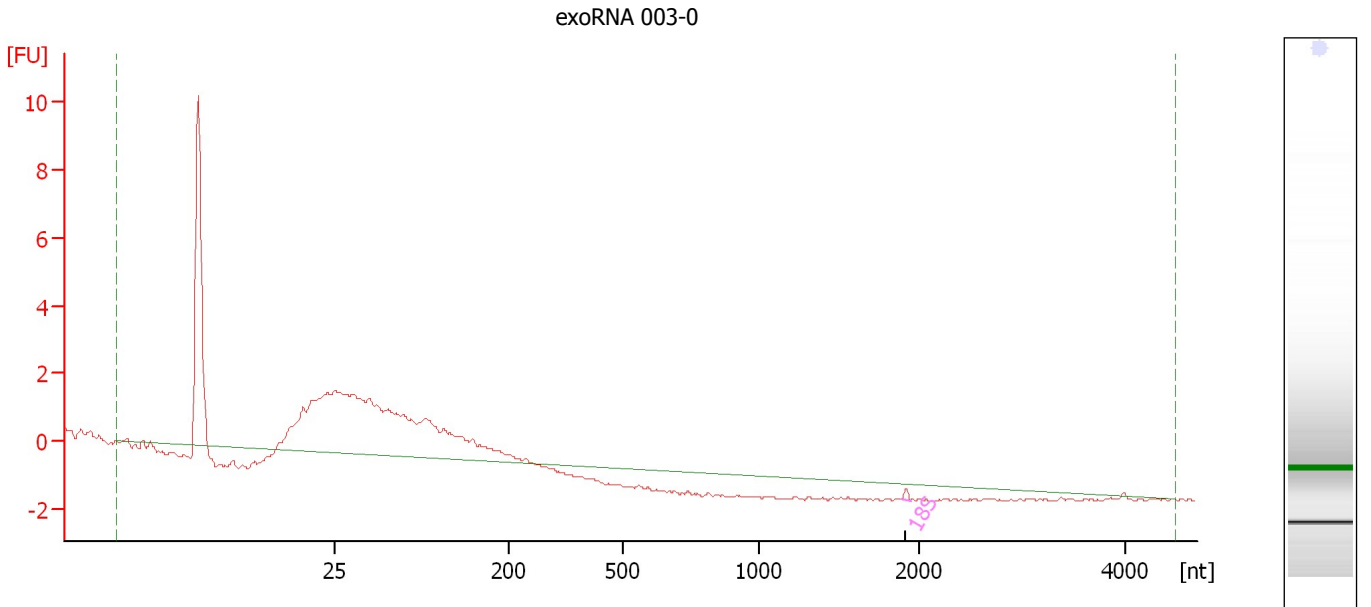
**Fragment table for sample 10 : exoRNA 010-1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
28S	2,589	2,761	0.3	0.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
 Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : exoRNA 003-0**

RNA Area:	20.1	RNA Integrity Number (RIN):	2.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	13 ng/μl		
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
		Result Flagging Label:	RIN: 2.80

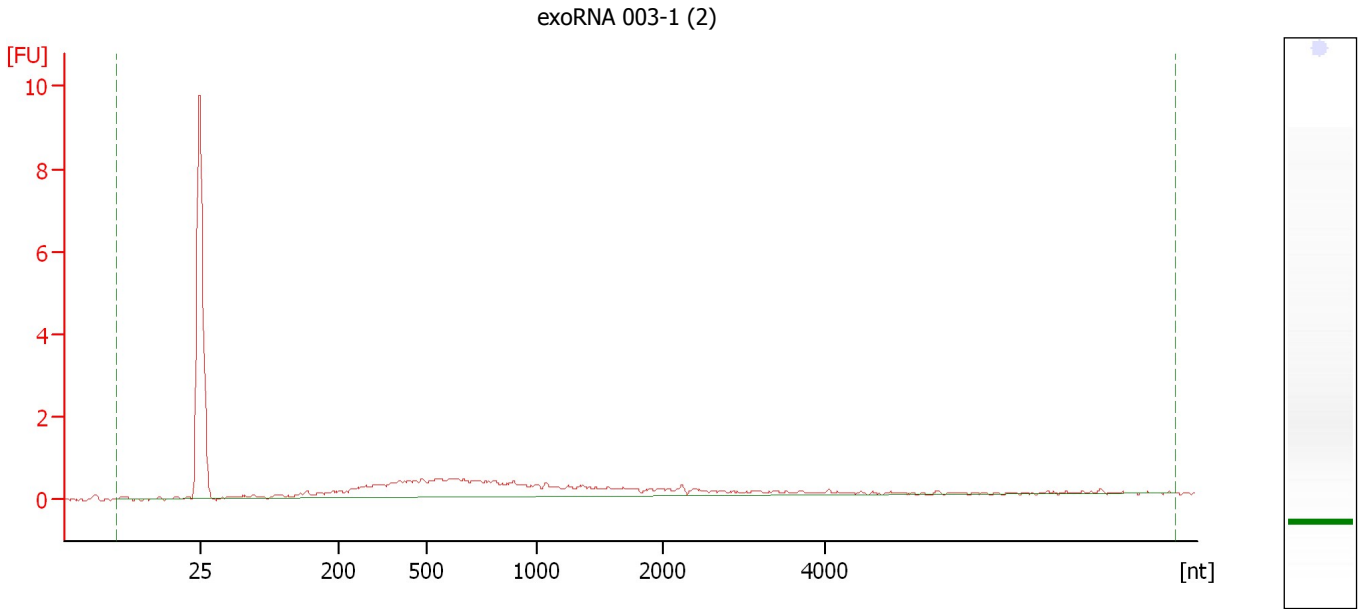
**Fragment table for sample 11 : exoRNA 003-0**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,880	1,947	0.1	0.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : exoRNA 003-1 (2)**

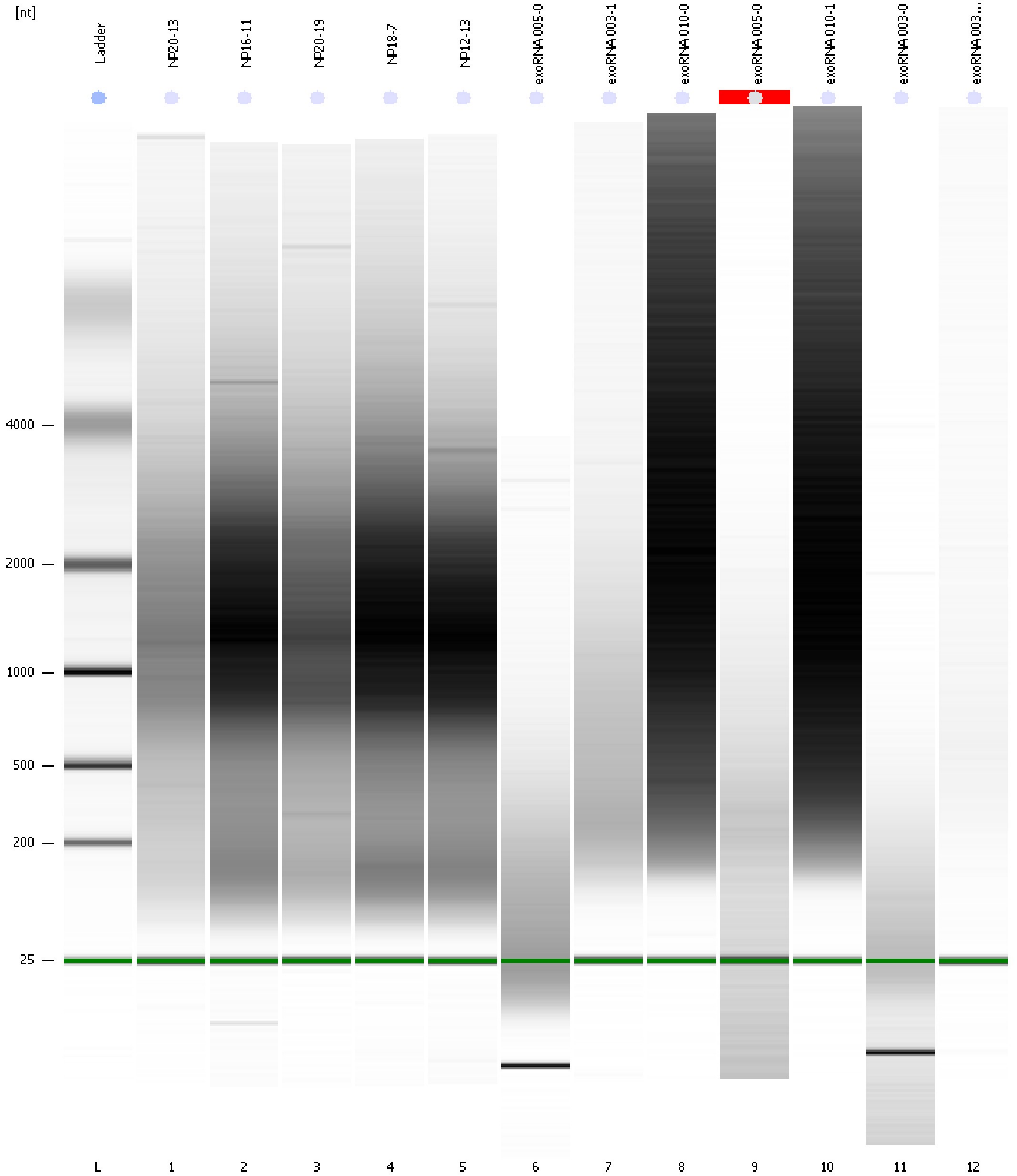
RNA Area:	16.1	RNA Integrity Number (RIN):	1 (B.02.08)
RNA Concentration:	11 ng/μl	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN:1



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad

Created: 3/7/2012 3:20:00 PM  
Modified: 3/7/2012 3:54:43 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano Created: 3/7/2012 3:20:00 PM  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-07\2012-03-07\_004.xad Modified: 3/7/2012 3:54:43 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		3/7/2012 3:43:47 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-07\2012-03-07_004.xad)		Instrument	Run		3/7/2012 3:20:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/7/2012 3:20:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/7/2012 3:20:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/7/2012 3:20:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/7/2012 3:20:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/7/2012 3:20:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/7/2012 3:20:05 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1