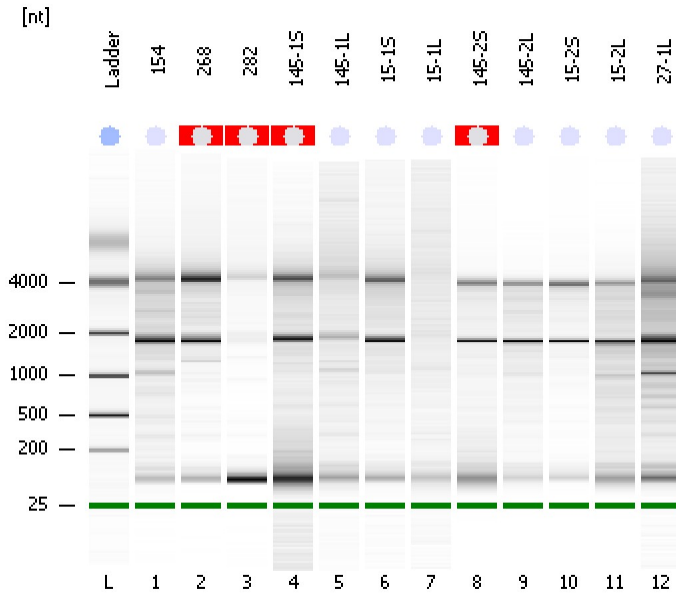


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

Electrophoresis File Run Summary



Instrument Information:

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

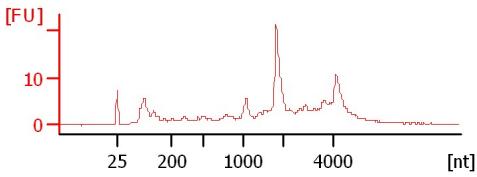
Assay Information:

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.

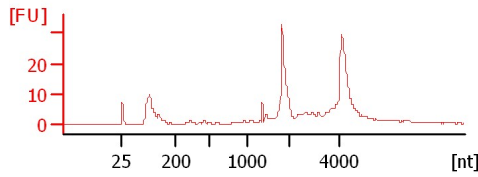
Chip Information:

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

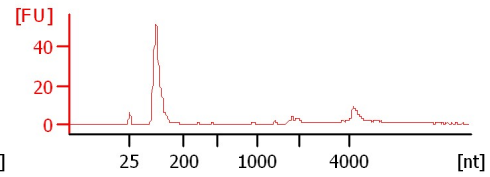
**154**  
QC\_011: total RNA  
RIN:7



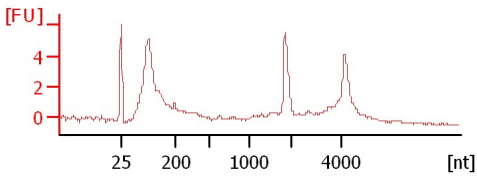
**268**  
QC\_011: total RNA  
RIN N/A



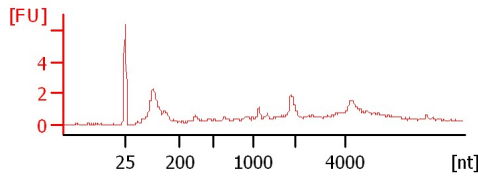
**282**  
QC\_011: total RNA  
RIN N/A



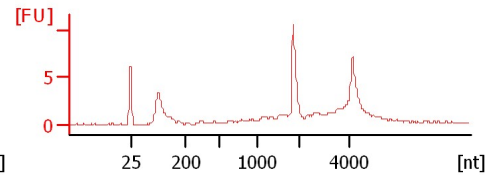
**145-1S**  
QC\_011: total RNA  
RIN N/A



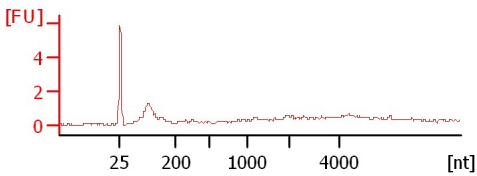
**145-1L**  
QC\_011: total RNA  
RIN: 5.60



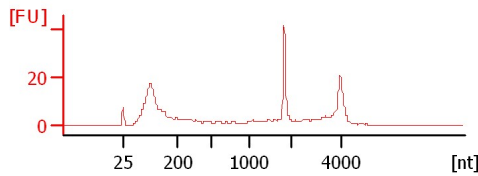
**15-1S**  
QC\_011: total RNA  
RIN: 8.10



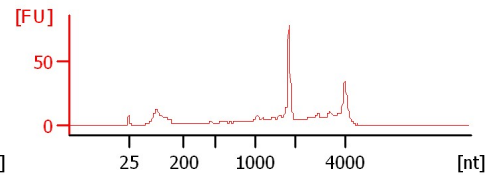
**15-1L**  
QC\_011: total RNA  
RIN: 2.10



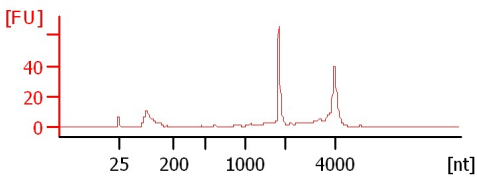
**145-2S**  
QC\_011: total RNA  
RIN N/A



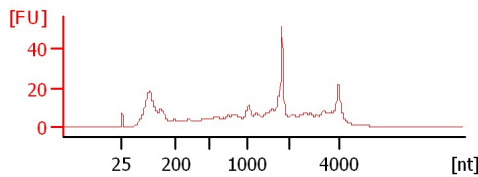
**145-2L**  
QC\_011: total RNA  
RIN: 6.80



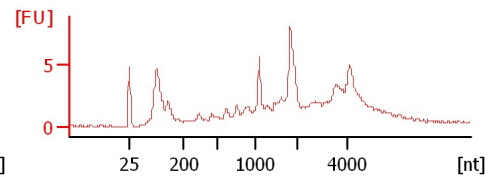
**15-2S**  
QC\_011: total RNA  
RIN: 8.50



**15-2L**  
QC\_011: total RNA  
RIN: 5.60



**27-1L**  
QC\_011: total RNA  
RIN: 6.30



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
 Modified: 3/30/2015 4:26:48 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
154	QC_011: total RNA	✓	RIN:7	
268	QC_011: total RNA	✓	RIN N/A	
282	QC_011: total RNA	✓	RIN N/A	
145-1S	QC_011: total RNA	✓	RIN N/A	
145-1L	QC_011: total RNA	✓	RIN: 5.60	
15-1S	QC_011: total RNA	✓	RIN: 8.10	
15-1L	QC_011: total RNA	✓	RIN: 2.10	
145-2S	QC_011: total RNA	✓	RIN N/A	
145-2L	QC_011: total RNA	✓	RIN: 6.80	
15-2S	QC_011: total RNA	✓	RIN: 8.50	
15-2L	QC_011: total RNA	✓	RIN: 5.60	
27-1L	QC_011: total RNA	✓	RIN: 6.30	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 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

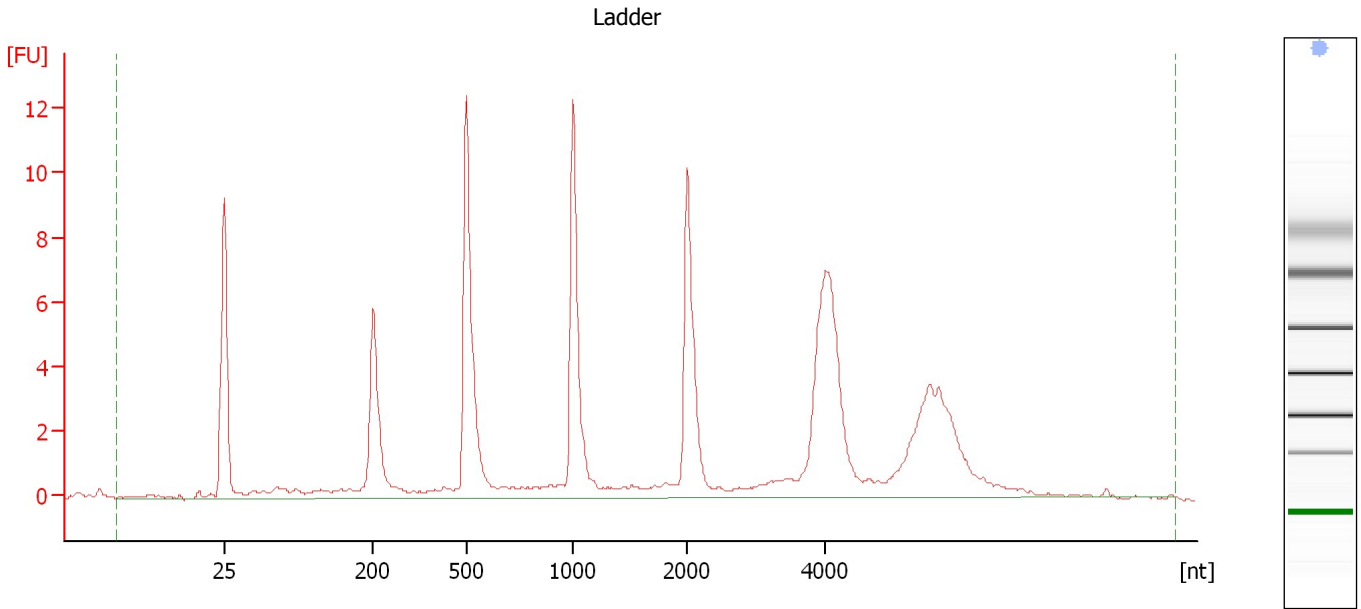
**Ladder**

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\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary**



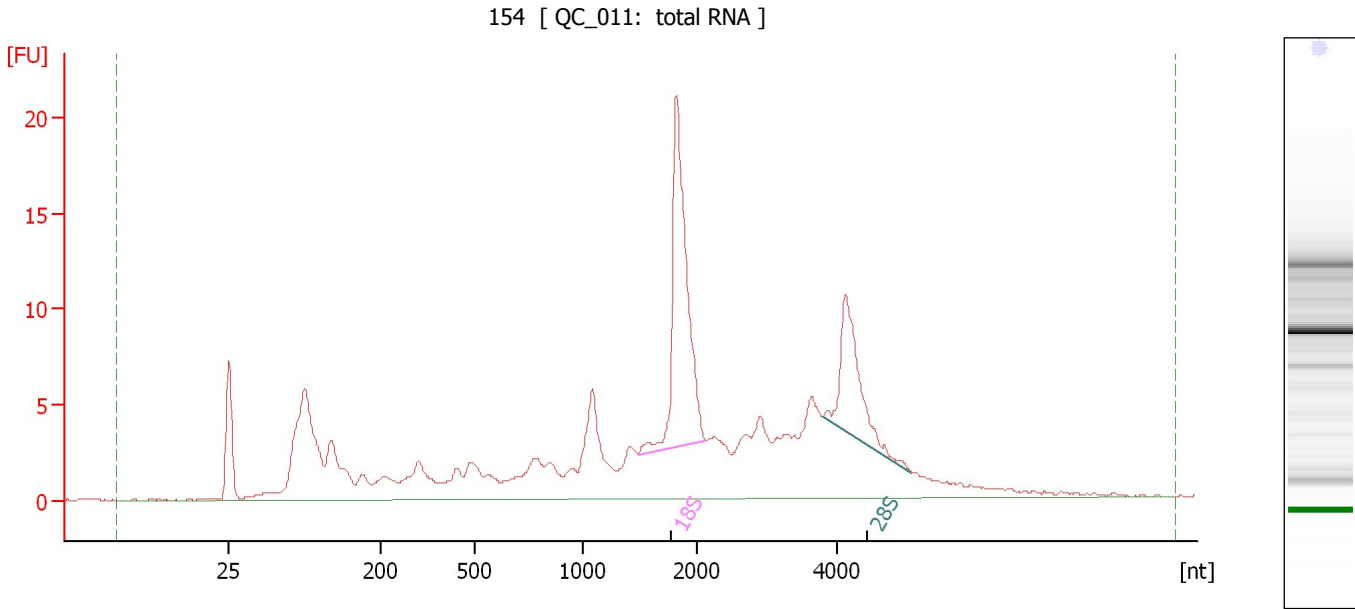
**Overall Results for Ladder**

RNA Area:	100.3	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
 Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 154**

RNA Area:	216.2	RNA Integrity Number (RIN):	7 (B.02.08)
RNA Concentration:	323 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]:	0.5	Result Flagging Label:	RIN:7

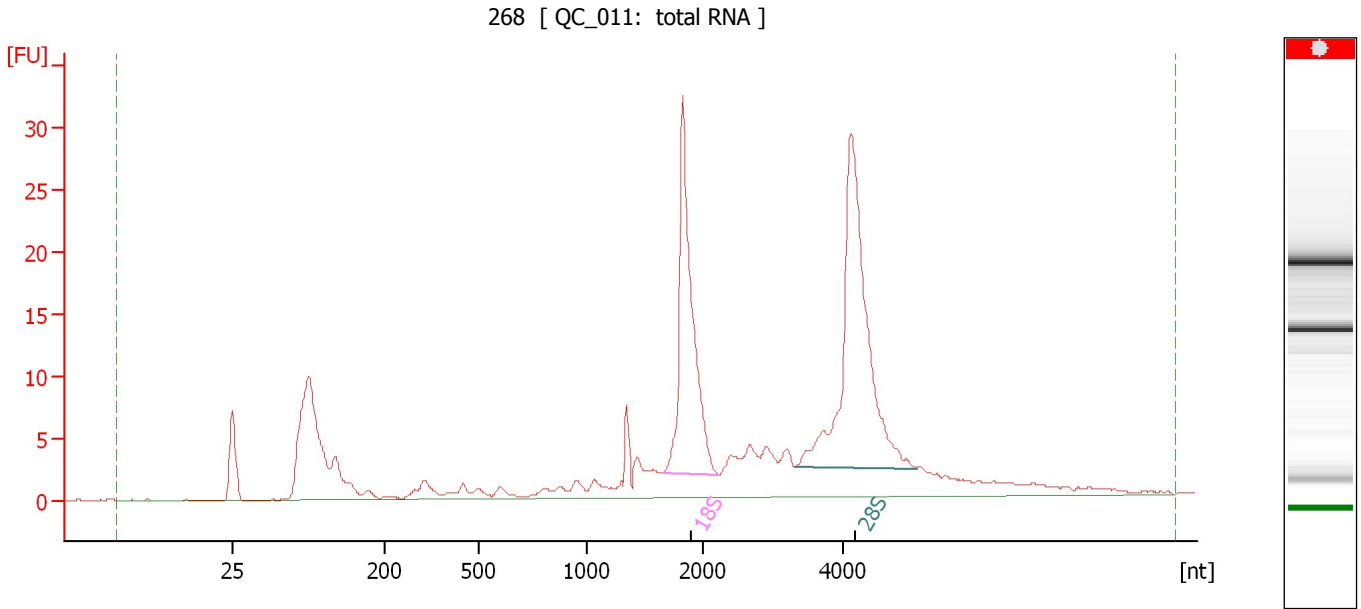
**Fragment table for sample 1 : 154**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,487	2,116	29.8	13.8
28S	3,789	5,078	14.0	6.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
 Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 268**

RNA Area:	257.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	386 ng/μl	Result Flagging Color:	<span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	1.4	Result Flagging Label:	RIN N/A

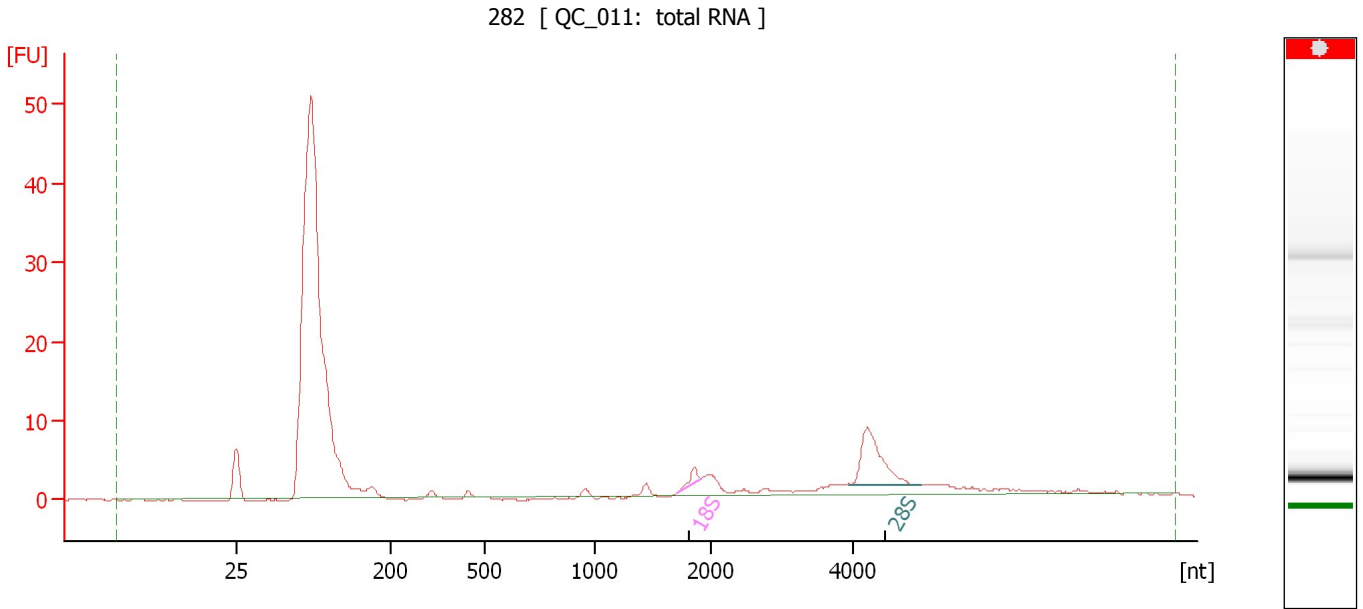
**Fragment table for sample 2 : 268**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,640	2,227	45.2	17.5
28S	3,295	5,034	62.4	24.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 282**

RNA Area:	229.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	344 ng/μl	Result Flagging Color:	<span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	9.1	Result Flagging Label:	RIN N/A

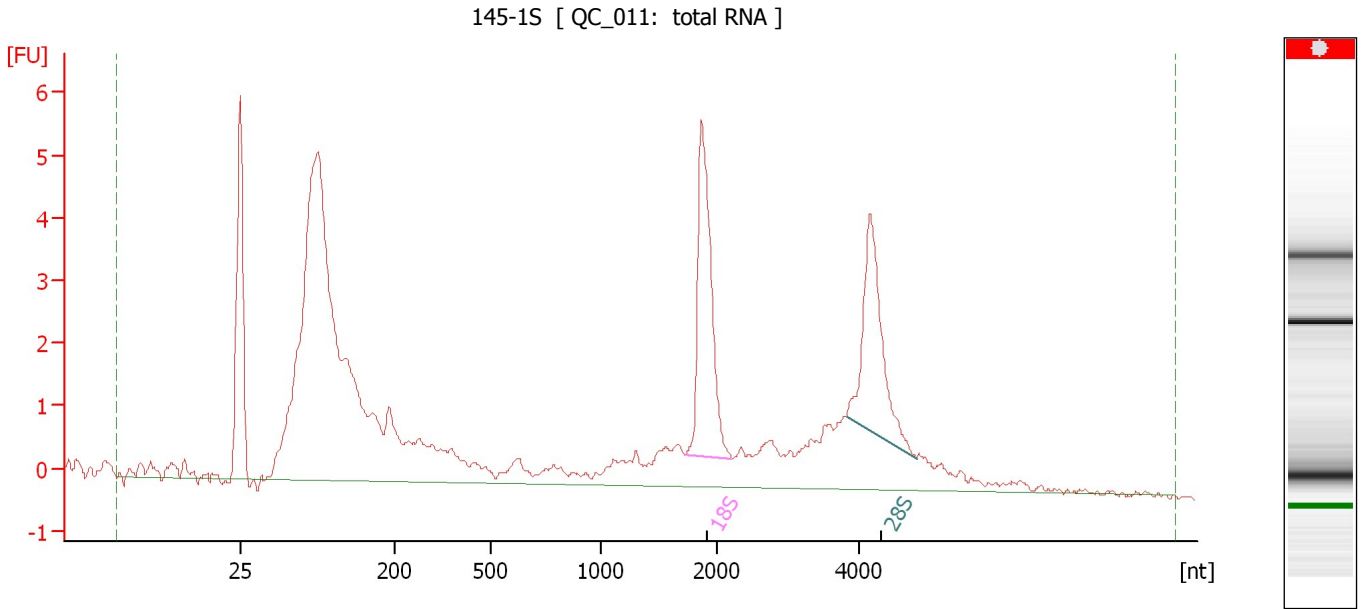
**Fragment table for sample 3 : 282**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,702	1,903	1.6	0.7
28S	3,957	4,956	14.1	6.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 145-1S**

RNA Area:	85.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	128 ng/μl	Result Flagging Color:	<span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.8	Result Flagging Label:	RIN N/A

**Fragment table for sample 4 : 145-1S**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,725	2,191	8.3	9.7
28S	3,815	4,793	6.4	7.4

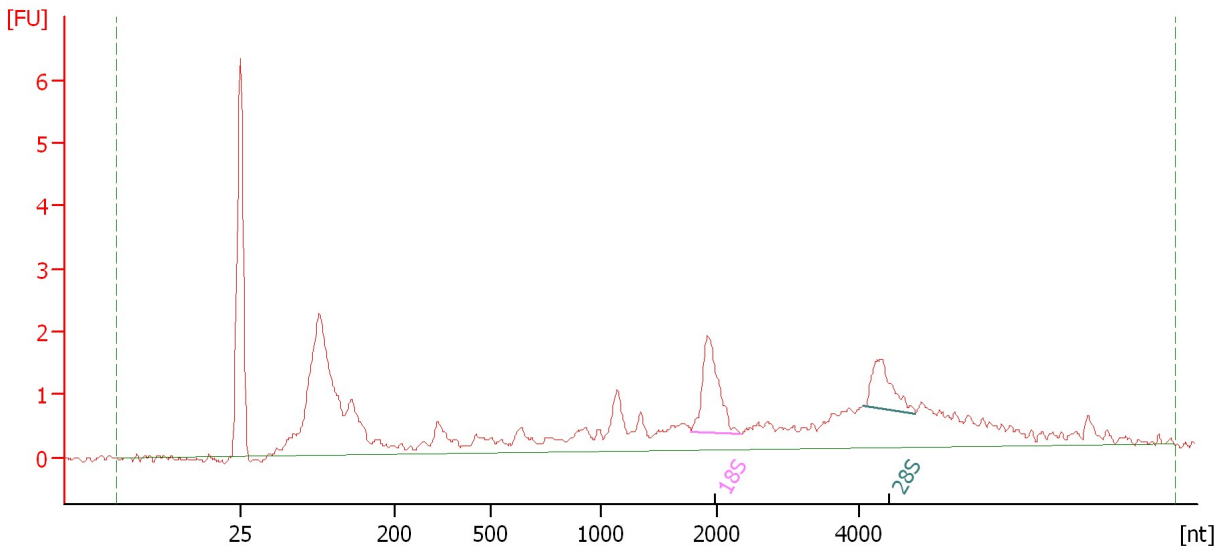


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**

145-1L [ QC\_011: total RNA ]



**Overall Results for sample 5 : 145-1L**

RNA Area: 40.7                      RNA Integrity Number (RIN): 5.6 (B.02.08)  
RNA Concentration: 61 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.6              Result Flagging Label: RIN: 5.60

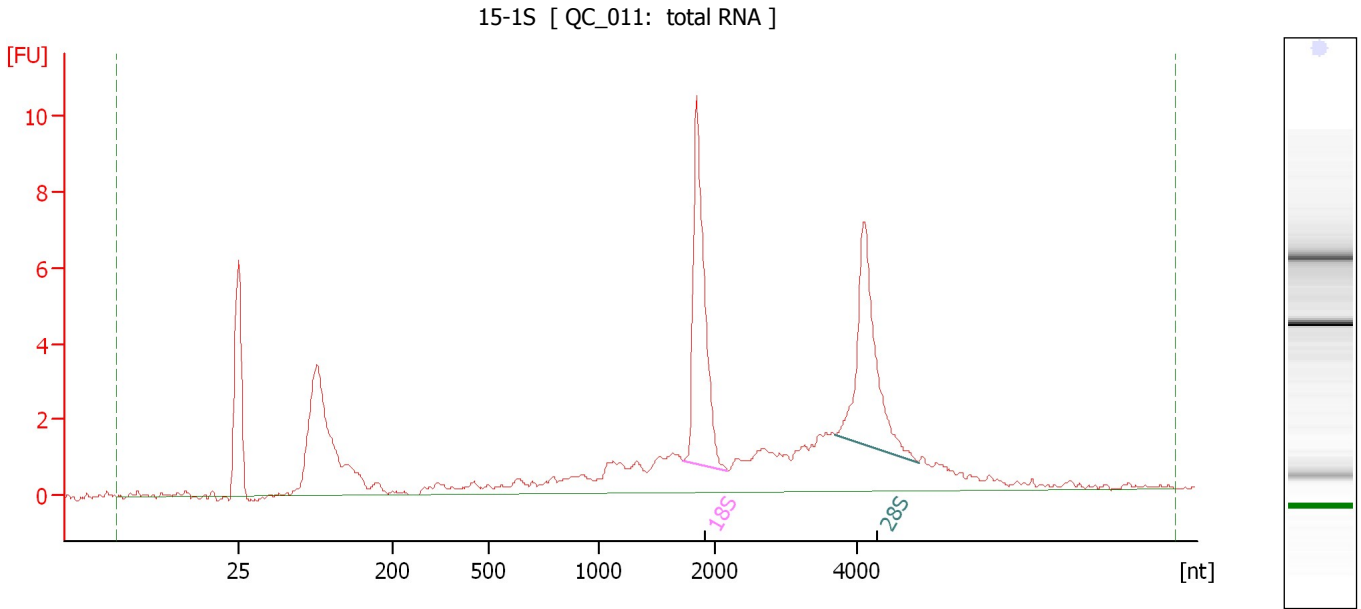
**Fragment table for sample 5 : 145-1L**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,779	2,326	2.8	6.9
28S	4,056	4,778	1.6	3.8

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 15-1S**

RNA Area:	76.3	RNA Integrity Number (RIN):	8.1 (B.02.08)
RNA Concentration:	114 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: 8.10

**Fragment table for sample 6 : 15-1S**

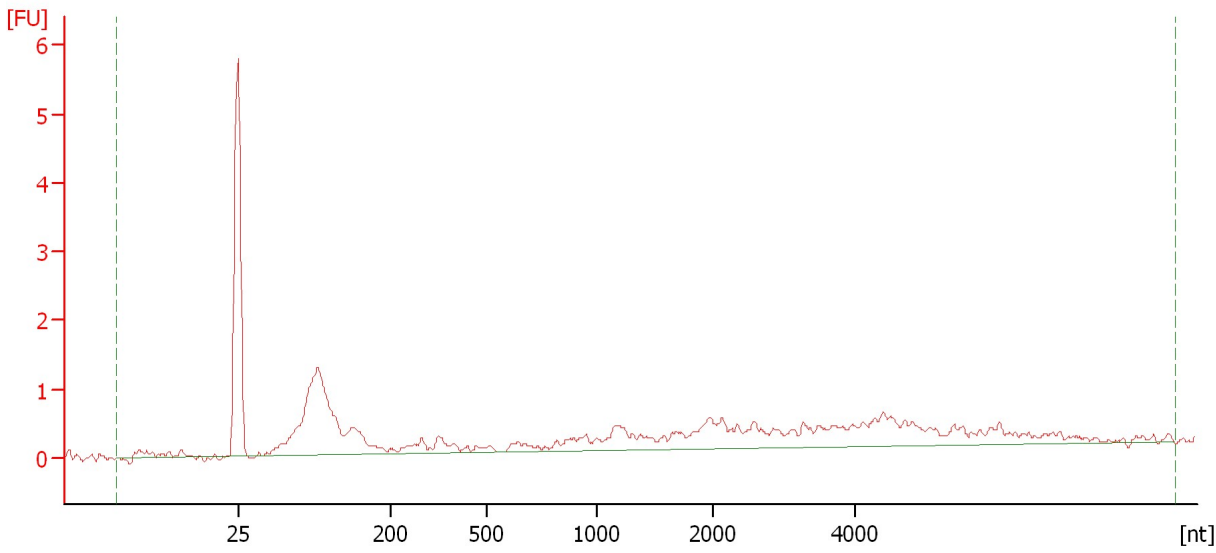
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,714	2,159	12.3	16.1
28S	3,682	4,857	10.3	13.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**

15-1L [ QC\_011: total RNA ]



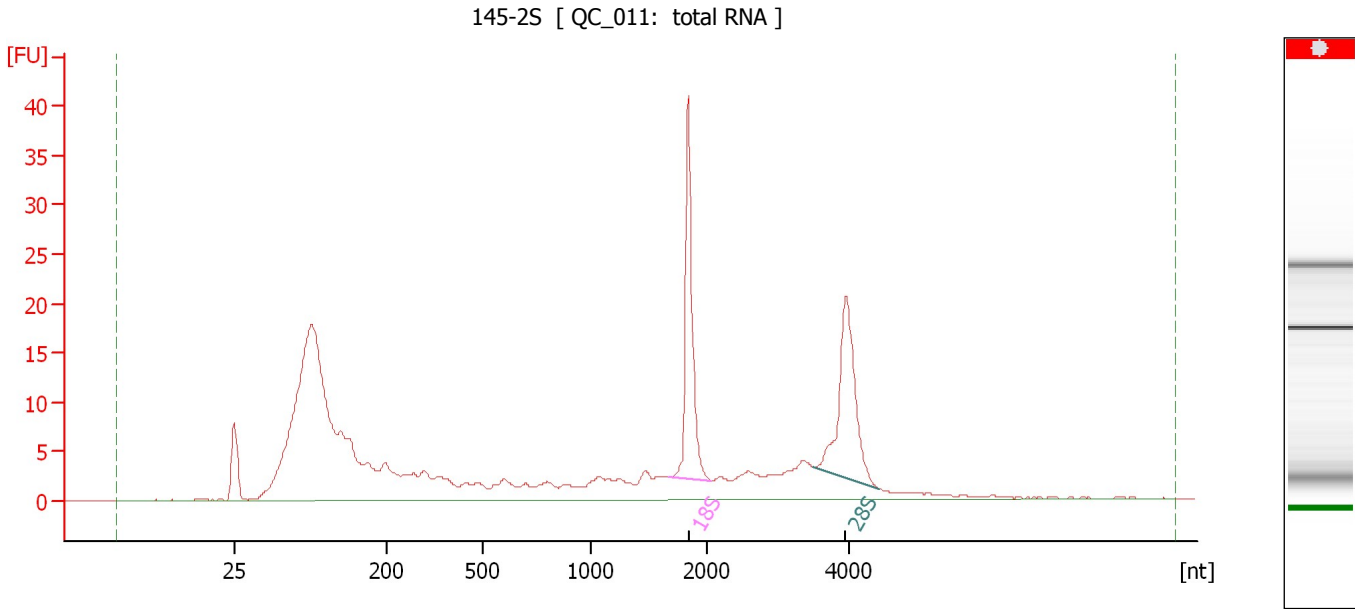
**Overall Results for sample 7 : 15-1L**

RNA Area:	22.7	RNA Integrity Number (RIN):	2.1 (B.02.08)
RNA Concentration:	34 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: 2.10

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
 Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 145-2S**

RNA Area:	315.4	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	472 ng/μl	Result Flagging Color:	<span style="background-color: #cccccc; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	1.0	Result Flagging Label:	RIN N/A

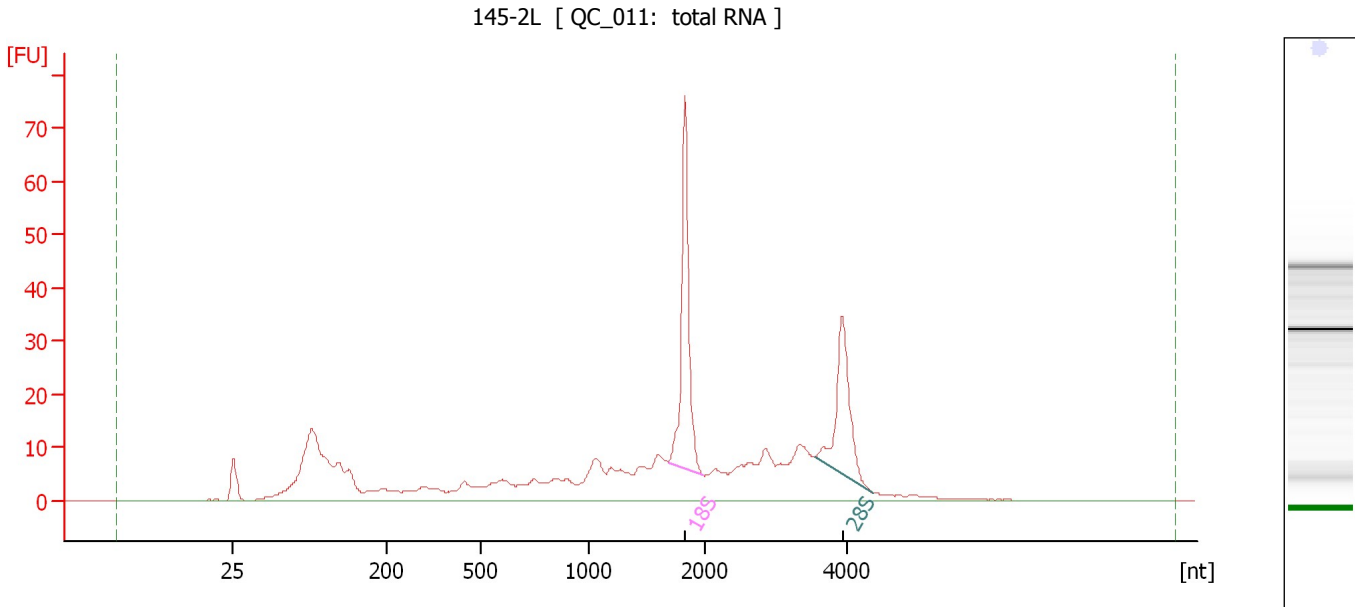
**Fragment table for sample 8 : 145-2S**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,671	2,047	30.7	9.7
28S	3,506	4,433	30.6	9.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 145-2L**

RNA Area:	446.5	RNA Integrity Number (RIN):	6.8 (B.02.08)
RNA Concentration:	668 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]:	0.7	Result Flagging Label:	RIN: 6.80

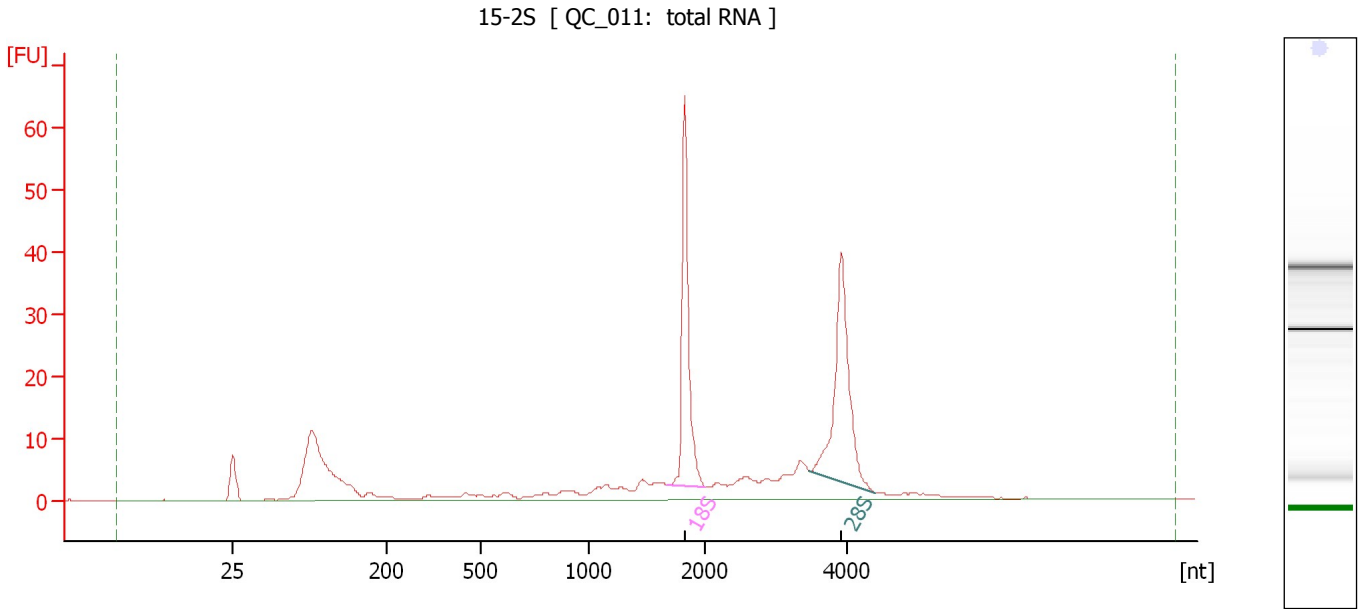
**Fragment table for sample 9 : 145-2L**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,679	1,981	60.2	13.5
28S	3,553	4,375	40.4	9.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 15-2S**

RNA Area:	261.7	RNA Integrity Number (RIN):	8.5 (B.02.08)
RNA Concentration:	391 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]:	1.1	Result Flagging Label:	RIN: 8.50

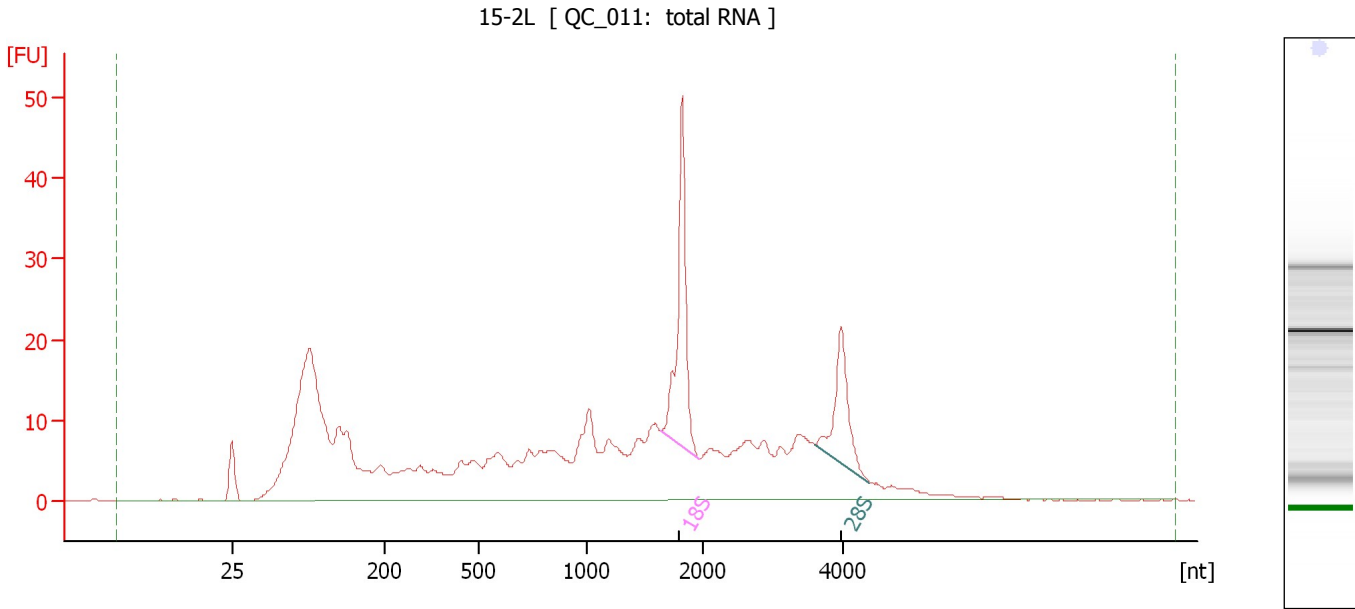
**Fragment table for sample 10 : 15-2S**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,669	2,000	48.6	18.6
28S	3,477	4,421	52.2	20.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 15-2L**

RNA Area:	524.0	RNA Integrity Number (RIN):	5.6 (B.02.08)
RNA Concentration:	784 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]:	0.5	Result Flagging Label:	RIN: 5.60

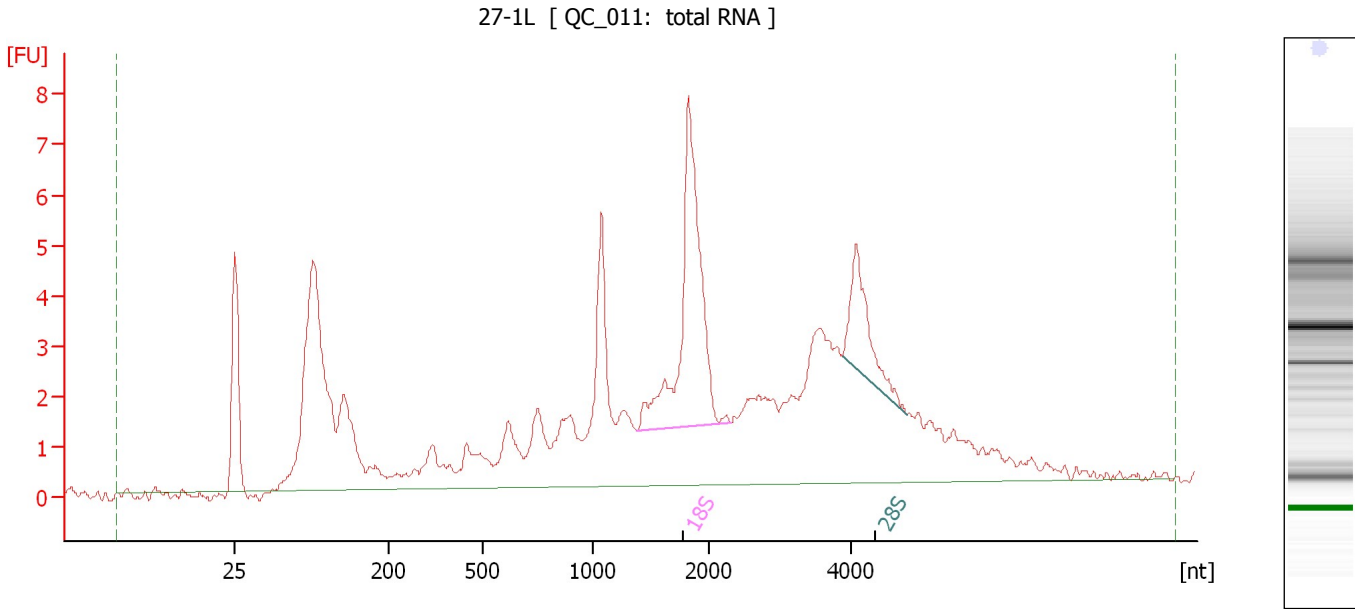
**Fragment table for sample 11 : 15-2L**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,631	1,953	42.0	8.0
28S	3,600	4,363	22.0	4.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
 Modified: 3/30/2015 4:26:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 27-1L**

RNA Area:	123.4	RNA Integrity Number (RIN):	6.3 (B.02.08)
RNA Concentration:	185 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: 6.30

**Fragment table for sample 12 : 27-1L**

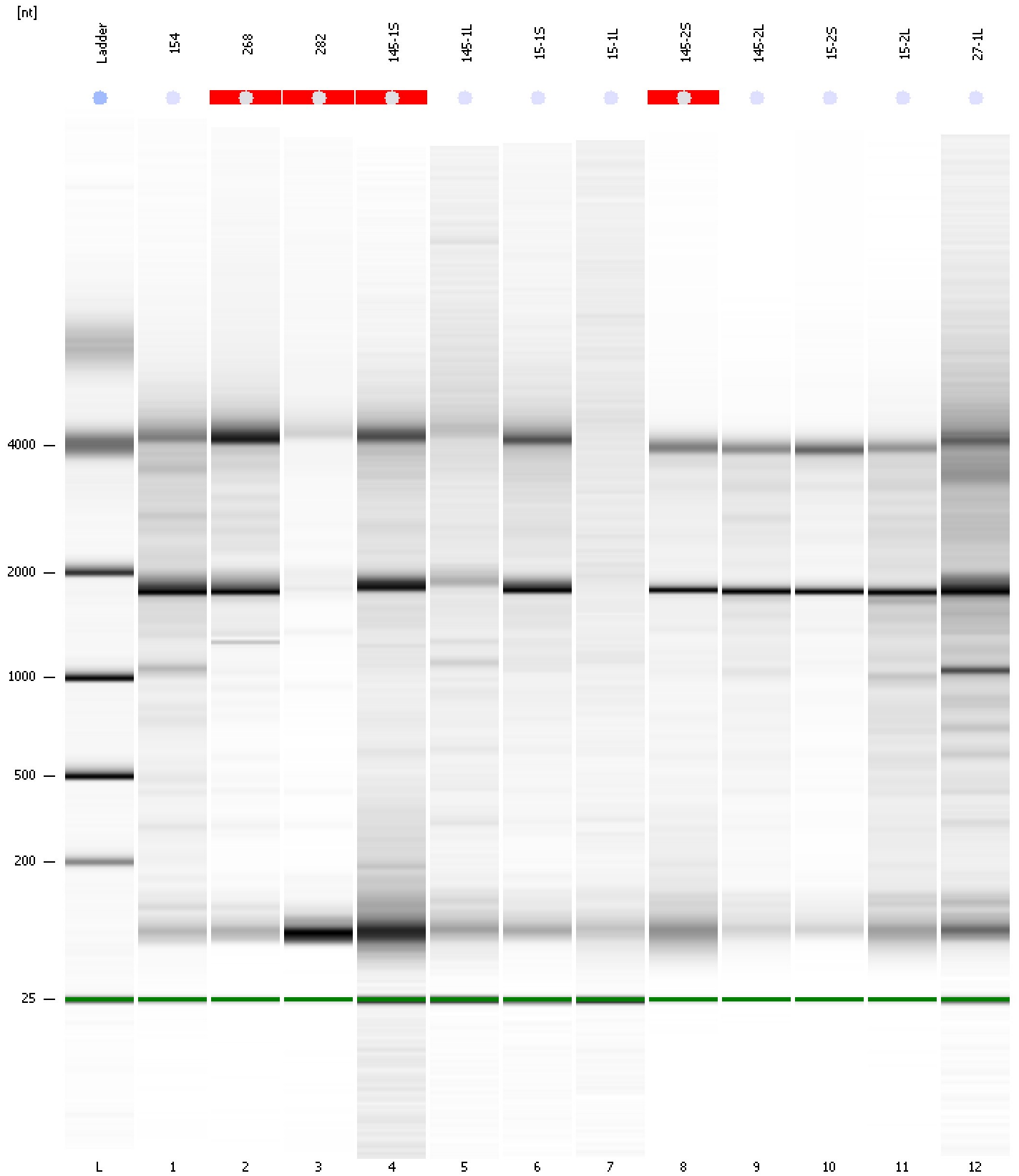
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,371	2,292	14.4	11.7
28S	3,884	4,793	4.3	3.5



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
Modified: 3/30/2015 4:26:48 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-03-30\2015-03-30\_003.xad

Created: 3/30/2015 4:02:57 PM  
 Modified: 3/30/2015 4:26:48 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		3/30/2015 4:26:46 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-03-30\2015-03-30_003.xad)		Instrument	Run		3/30/2015 4:03:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		3/30/2015 4:03:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		3/30/2015 4:03:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		3/30/2015 4:03:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		3/30/2015 4:03:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		3/30/2015 4:03:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		3/30/2015 4:03:02 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1