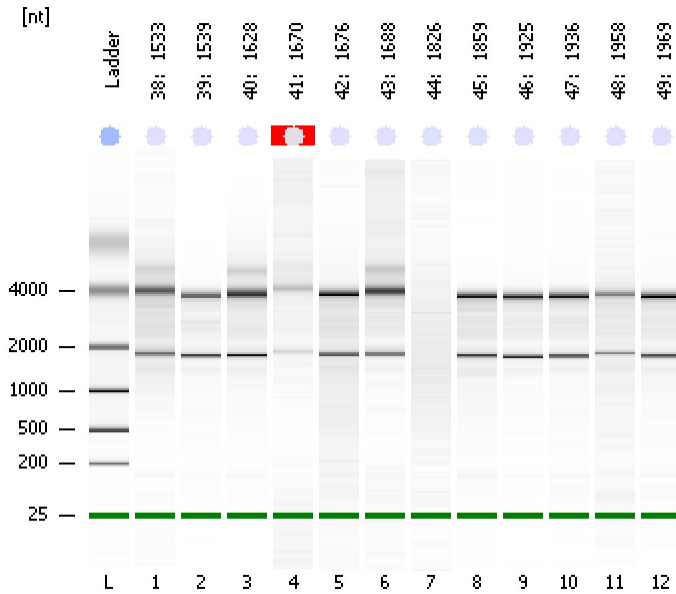


Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electrophoresis File Run Summary



Instrument Information:

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

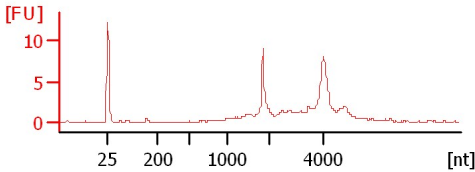
Assay Information:

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)
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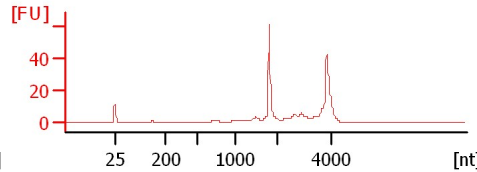
Chip Information:

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

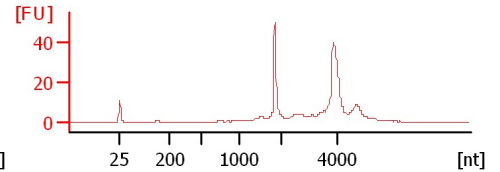
38: 1533
HiSeq_753 Total RNA QC
RIN: 8.50



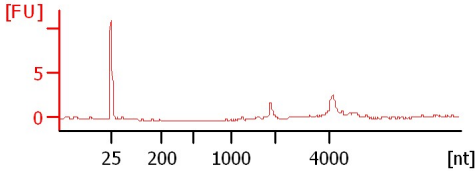
39: 1539
HiSeq_753 Total RNA QC
RIN: 8.90



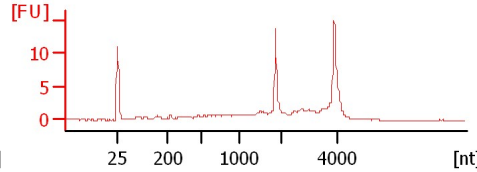
40: 1628
HiSeq_753 Total RNA QC
RIN: 8.90



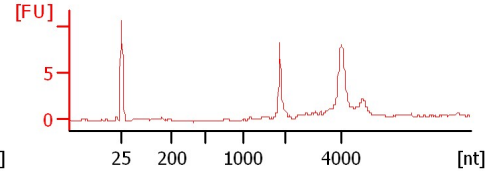
41: 1670
HiSeq_753 Total RNA QC
RIN N/A



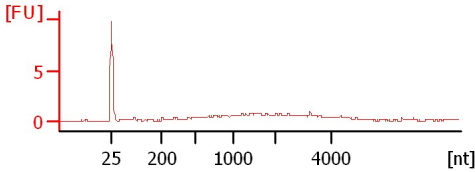
42: 1676
HiSeq_753 Total RNA QC
RIN: 7.80



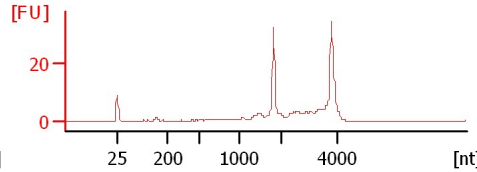
43: 1688
HiSeq_753 Total RNA QC
RIN: 10



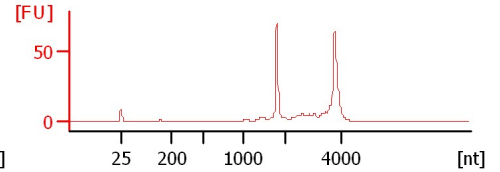
44: 1826
HiSeq_753 Total RNA QC
RIN: 1.10



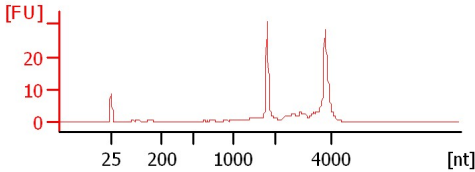
45: 1859
HiSeq_753 Total RNA QC
RIN: 8.30



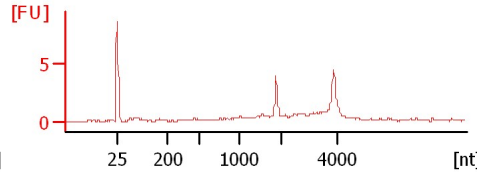
46: 1925
HiSeq_753 Total RNA QC
RIN: 9.40



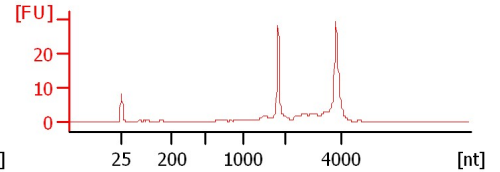
47: 1936
HiSeq_753 Total RNA QC
RIN: 9.10



48: 1958
HiSeq_753 Total RNA QC
RIN: 7.70



49: 1969
HiSeq_753 Total RNA QC
RIN: 8.80



Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
38: 1533	HiSeq_753 Total RNA QC	✓	RIN: 8.50	
39: 1539	HiSeq_753 Total RNA QC	✓	RIN: 8.90	
40: 1628	HiSeq_753 Total RNA QC	✓	RIN: 8.90	
41: 1670	HiSeq_753 Total RNA QC	✓	RIN N/A	
42: 1676	HiSeq_753 Total RNA QC	✓	RIN: 7.80	
43: 1688	HiSeq_753 Total RNA QC	✓	RIN:10	
44: 1826	HiSeq_753 Total RNA QC	✓	RIN: 1.10	
45: 1859	HiSeq_753 Total RNA QC	✓	RIN: 8.30	
46: 1925	HiSeq_753 Total RNA QC	✓	RIN: 9.40	
47: 1936	HiSeq_753 Total RNA QC	✓	RIN: 9.10	
48: 1958	HiSeq_753 Total RNA QC	✓	RIN: 7.70	
49: 1969	HiSeq_753 Total RNA QC	✓	RIN: 8.80	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 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

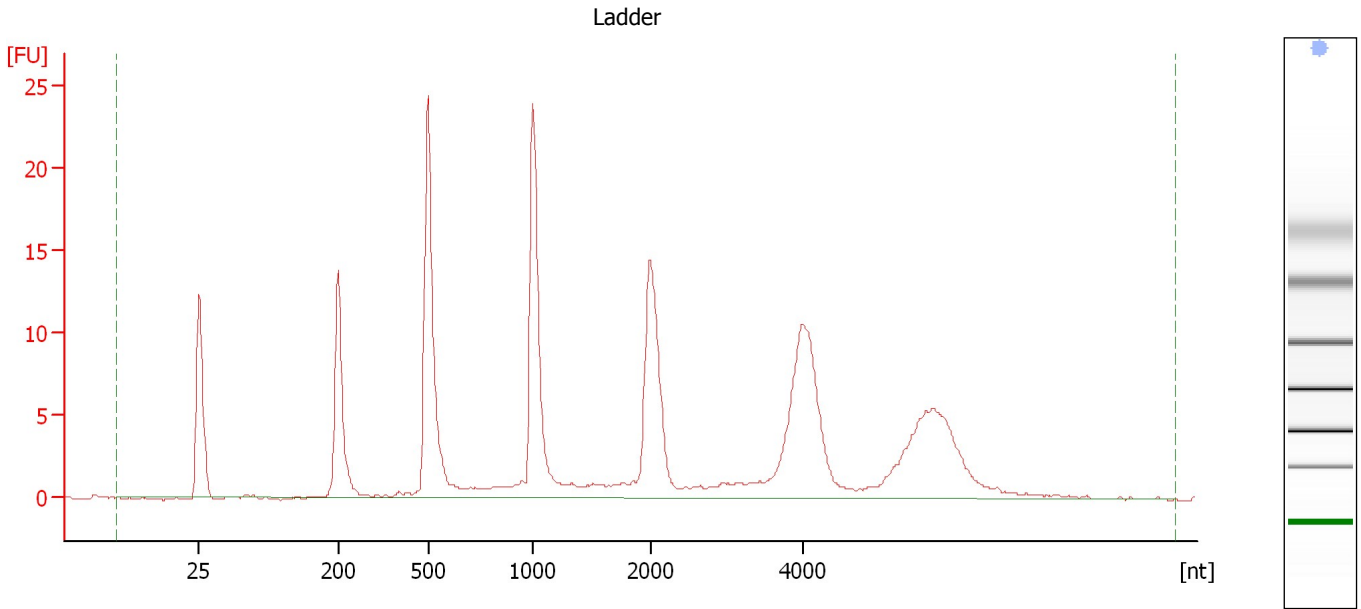
Ladder

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

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary



Overall Results for Ladder

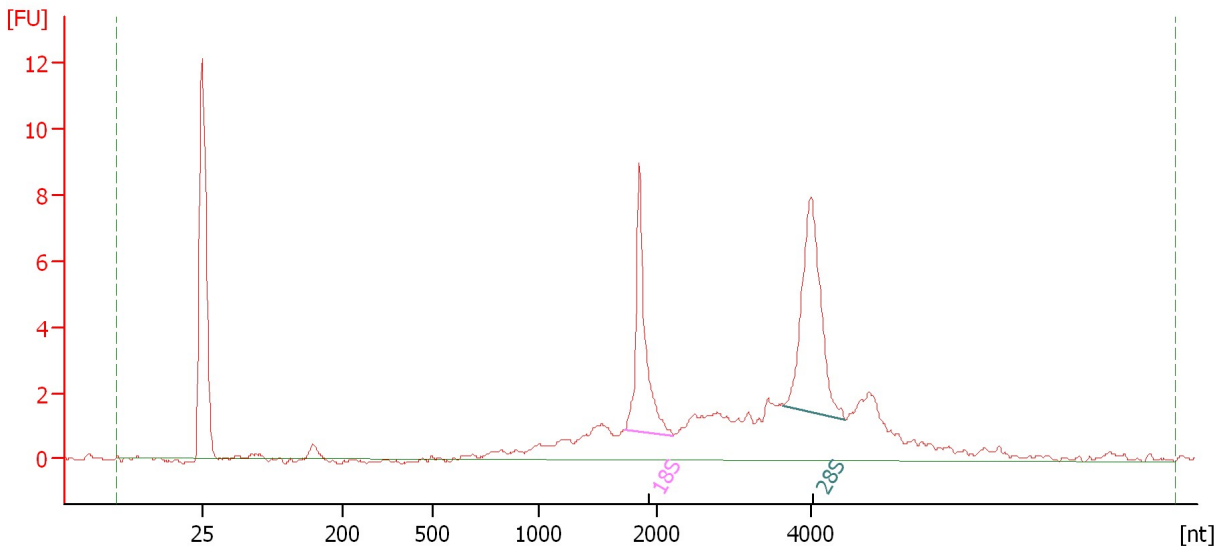
RNA Area:	194.3	Result Flagging Color:	
RNA Concentration:	150 ng/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

38: 1533 [HiSeq_753 Total RNA QC]



Overall Results for sample 1 : 38: 1533

RNA Area:	68.6	RNA Integrity Number (RIN):	8.5 (B.02.08)
RNA Concentration:	53 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.4	Result Flagging Label:	RIN: 8.50

Fragment table for sample 1 : 38: 1533

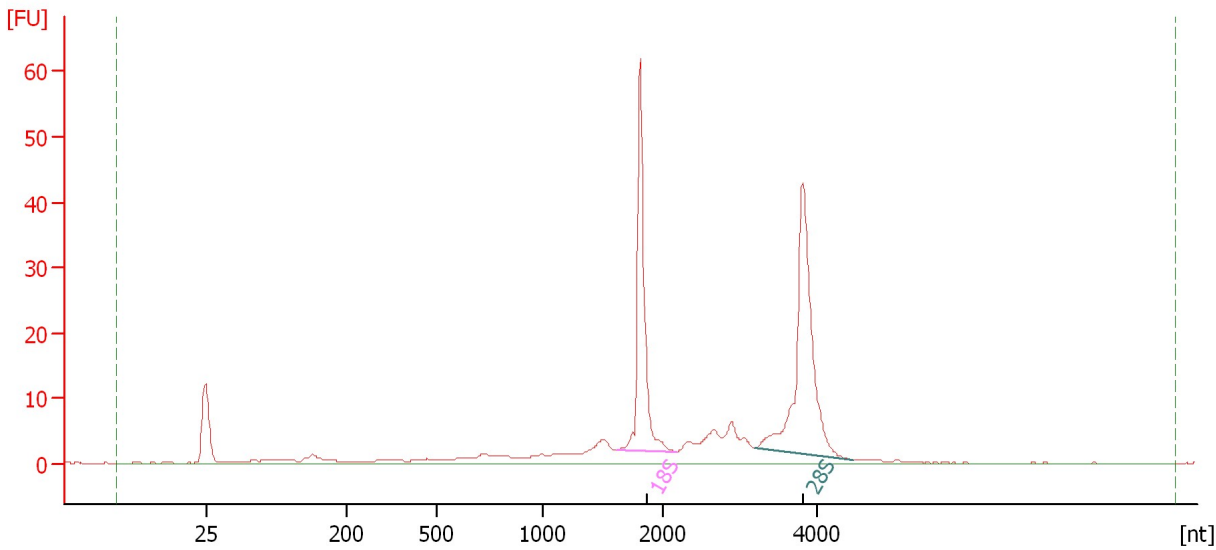
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,740	2,226	8.9	12.9
28S	3,657	4,463	12.7	18.5

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

39: 1539 [HiSeq_753 Total RNA QC]



Overall Results for sample 2 : 39: 1539

RNA Area: 220.9 RNA Integrity Number (RIN): 8.9 (B.02.08)
RNA Concentration: 171 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.3 Result Flagging Label: RIN: 8.90

Fragment table for sample 2 : 39: 1539

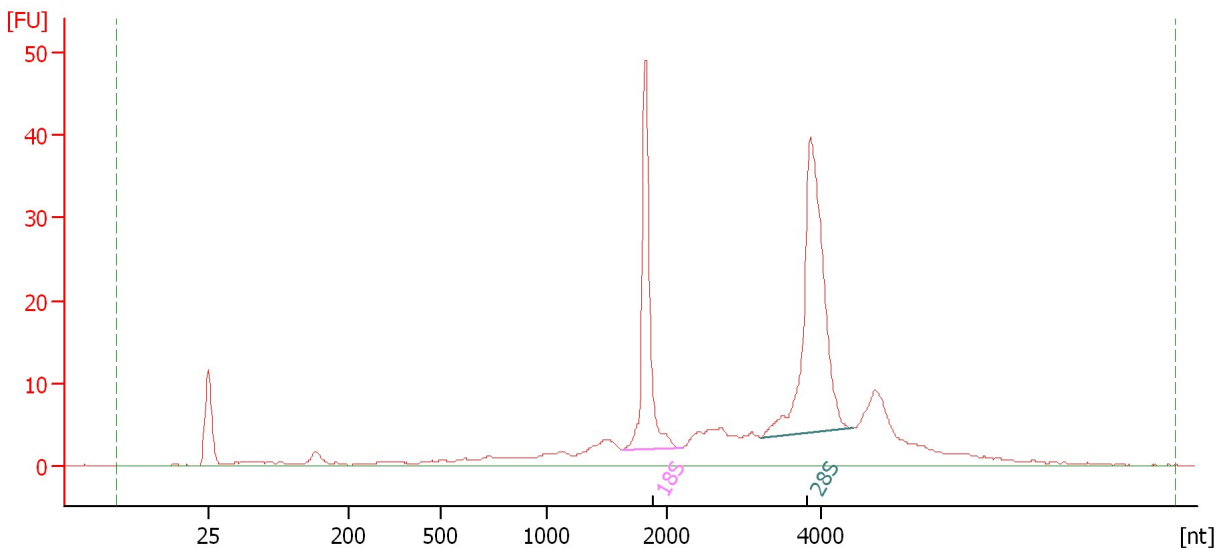
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,619	2,187	49.7	22.5
28S	3,195	4,465	66.2	30.0

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

40: 1628 [HiSeq_753 Total RNA QC]



Overall Results for sample 3 : 40: 1628

RNA Area: 270.6 RNA Integrity Number (RIN): 8.9 (B.02.08)
RNA Concentration: 209 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.8 Result Flagging Label: RIN: 8.90

Fragment table for sample 3 : 40: 1628

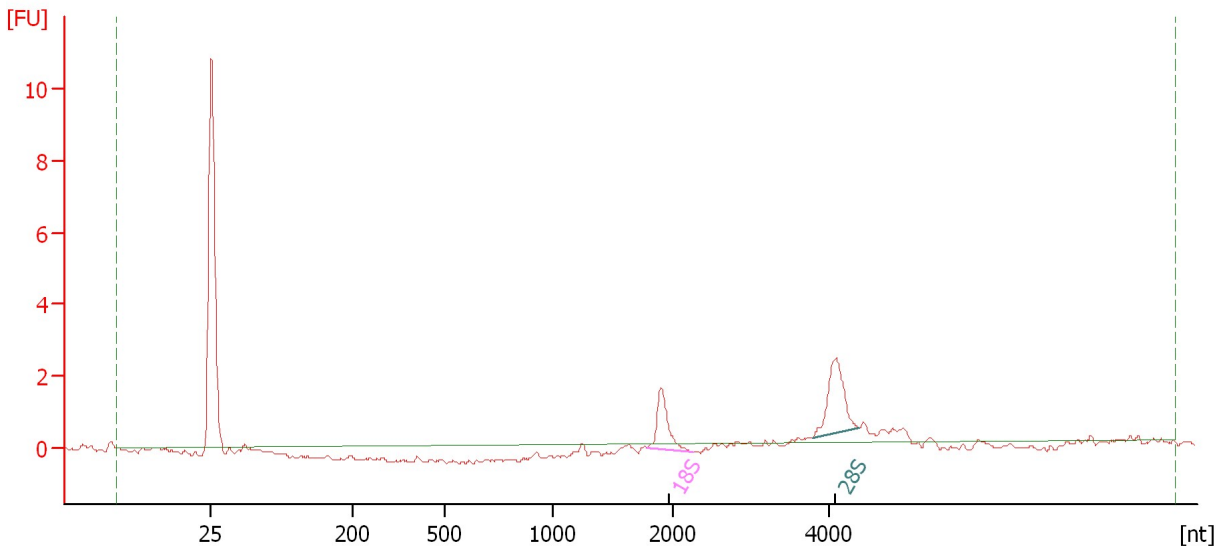
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,631	2,203	42.0	15.5
28S	3,220	4,403	74.3	27.5

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

41: 1670 [HiSeq_753 Total RNA QC]



Overall Results for sample 4 : 41: 1670

RNA Area:	7.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	6 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.6	Result Flagging Label:	RIN N/A

Fragment table for sample 4 : 41: 1670

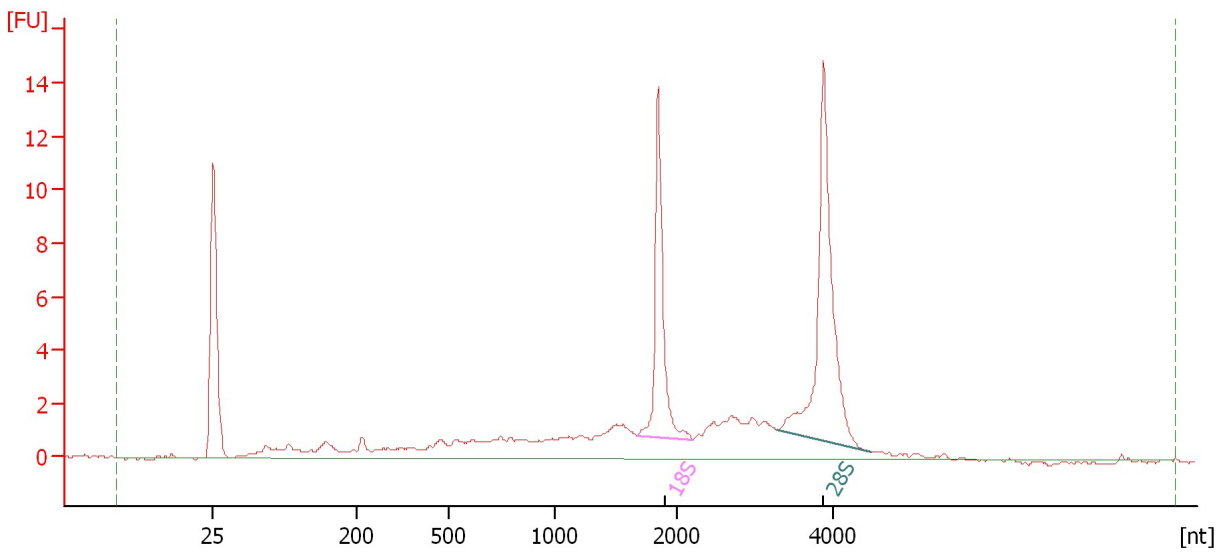
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,778	2,260	2.2	28.0
28S	3,790	4,392	3.4	43.9

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

42: 1676 [HiSeq_753 Total RNA QC]



Overall Results for sample 5 : 42: 1676

RNA Area:	82.9	RNA Integrity Number (RIN):	7.8 (B.02.08)
RNA Concentration:	64 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.8	Result Flagging Label:	RIN: 7.80

Fragment table for sample 5 : 42: 1676

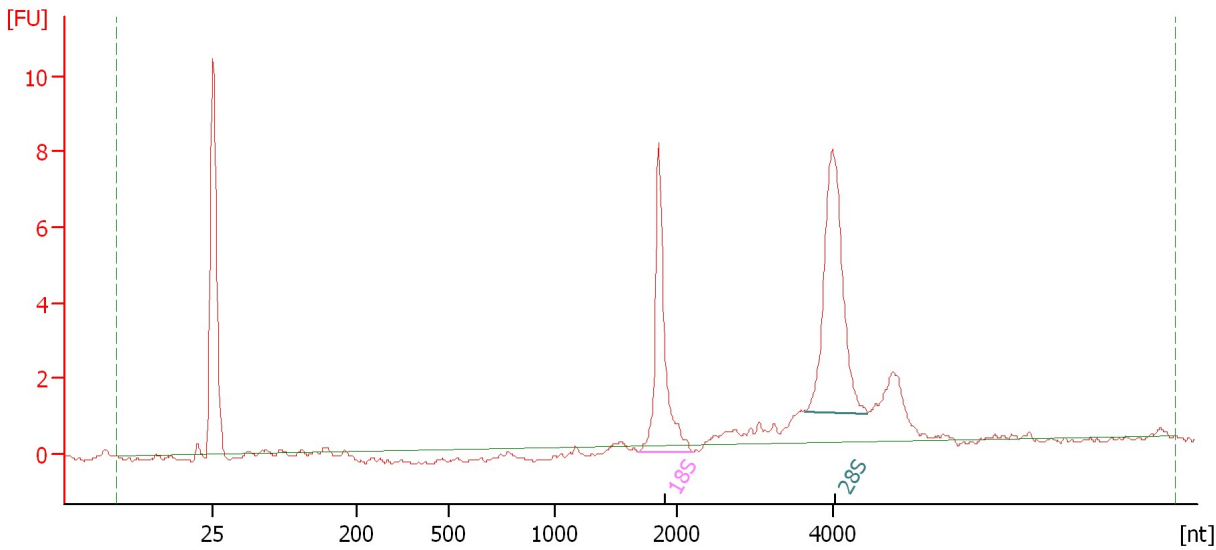
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,666	2,207	11.6	14.0
28S	3,282	4,466	20.4	24.5

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
 Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

43: 1688 [HiSeq_753 Total RNA QC]



Overall Results for sample 6 : 43: 1688

RNA Area:	34.9	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	27 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.5	Result Flagging Label:	RIN:10

Fragment table for sample 6 : 43: 1688

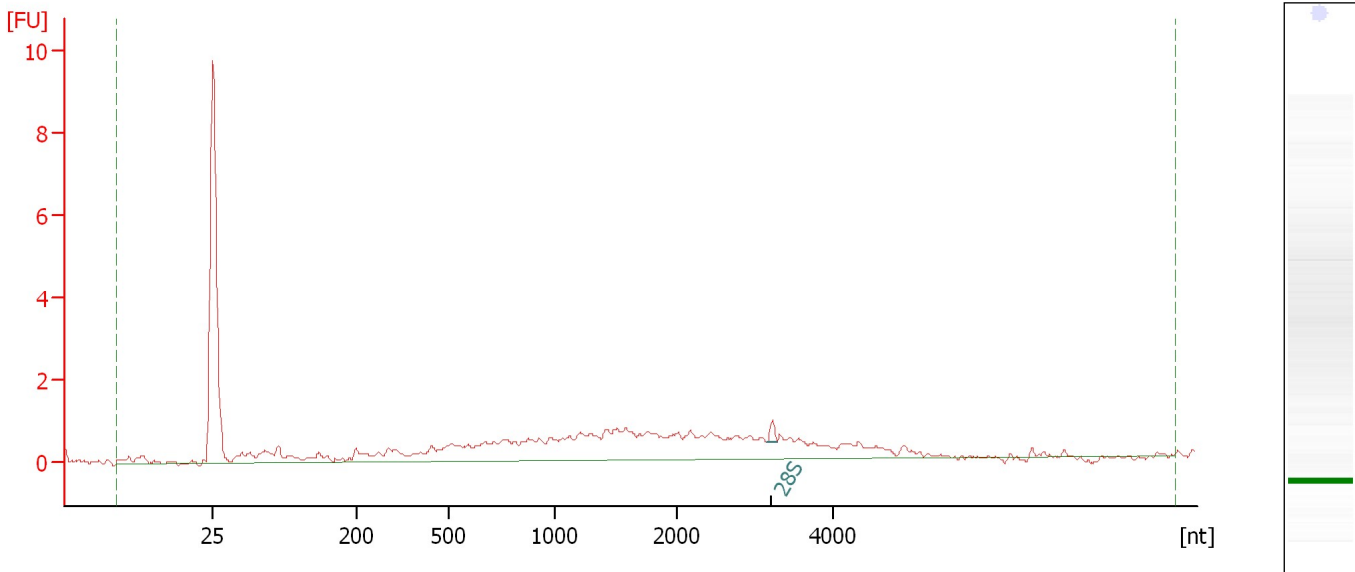
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,683	2,207	8.9	25.6
28S	3,636	4,425	13.1	37.5

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

44: 1826 [HiSeq_753 Total RNA QC]



Overall Results for sample 7 : 44: 1826

RNA Area:	30.2	RNA Integrity Number (RIN):	1.1 (B.02.08)
RNA Concentration:	23 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 1.10

Fragment table for sample 7 : 44: 1826

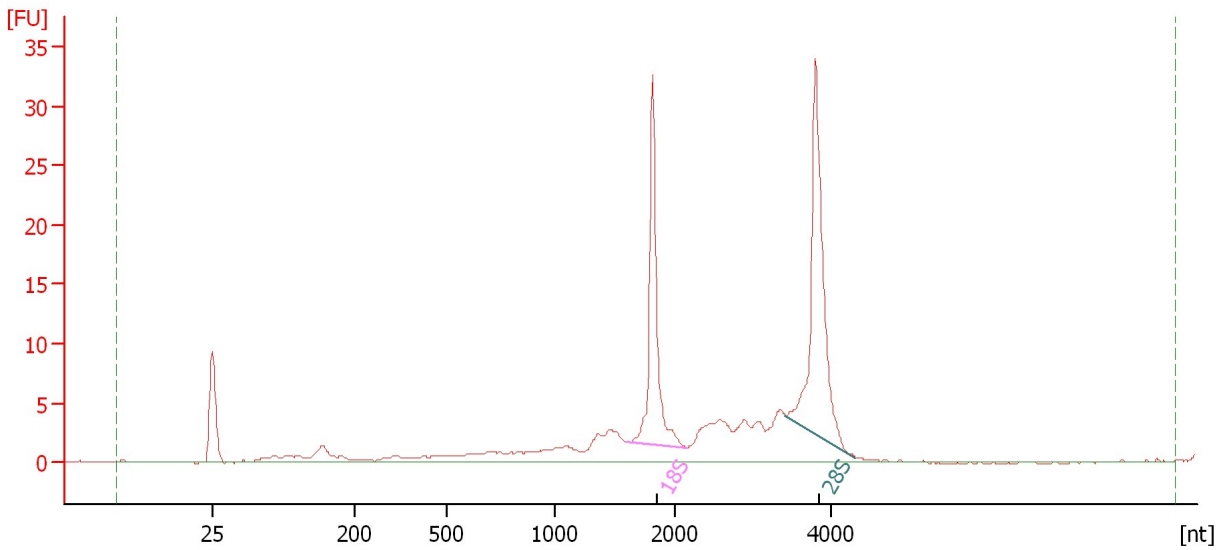
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
28S	3,146	3,282	0.2	0.7

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

45: 1859 [HiSeq_753 Total RNA QC]



Overall Results for sample 8 : 45: 1859

RNA Area:	156.3	RNA Integrity Number (RIN):	8.3 (B.02.08)
RNA Concentration:	121 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.3	Result Flagging Label:	RIN: 8.30

Fragment table for sample 8 : 45: 1859

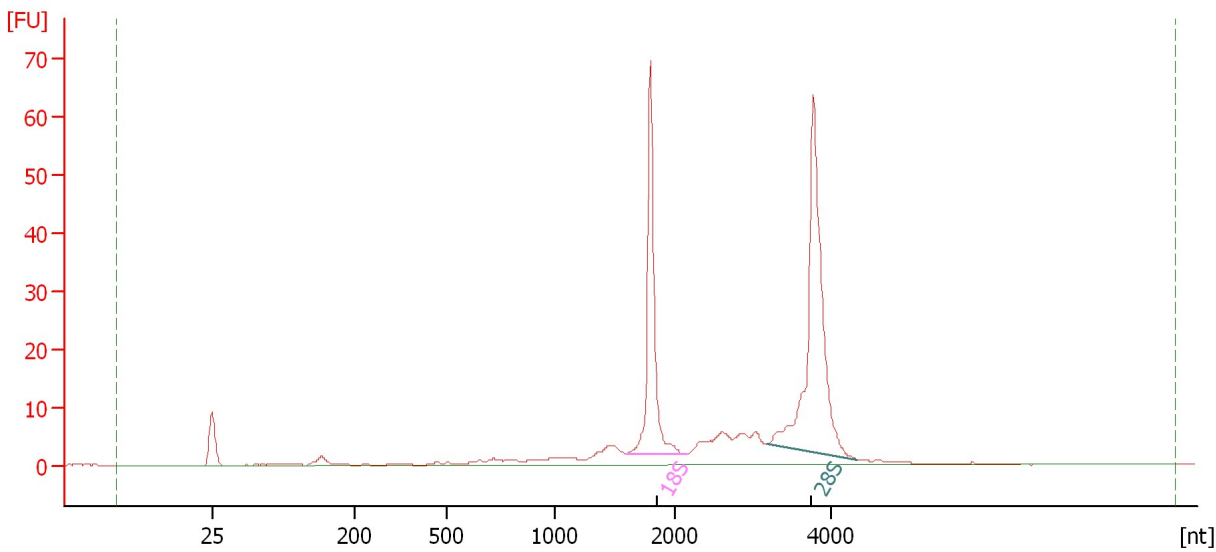
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,602	2,165	28.3	18.1
28S	3,420	4,306	37.8	24.2

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

46: 1925 [HiSeq_753 Total RNA QC]



Overall Results for sample 9 : 46: 1925

RNA Area: 241.8 RNA Integrity Number (RIN): 9.4 (B.02.08)
RNA Concentration: 187 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.40

Fragment table for sample 9 : 46: 1925

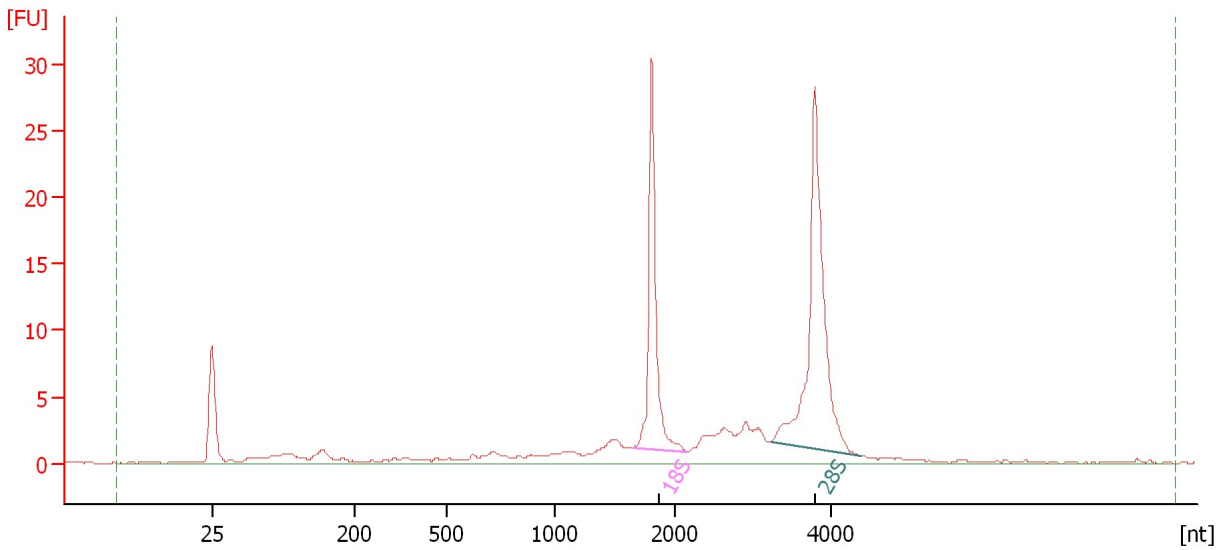
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,602	2,165	57.0	23.6
28S	3,188	4,333	89.5	37.0

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

47: 1936 [HiSeq_753 Total RNA QC]



Overall Results for sample 10 : 47: 1936

RNA Area: 132.4 RNA Integrity Number (RIN): 9.1 (B.02.08)
RNA Concentration: 102 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.10

Fragment table for sample 10 : 47: 1936

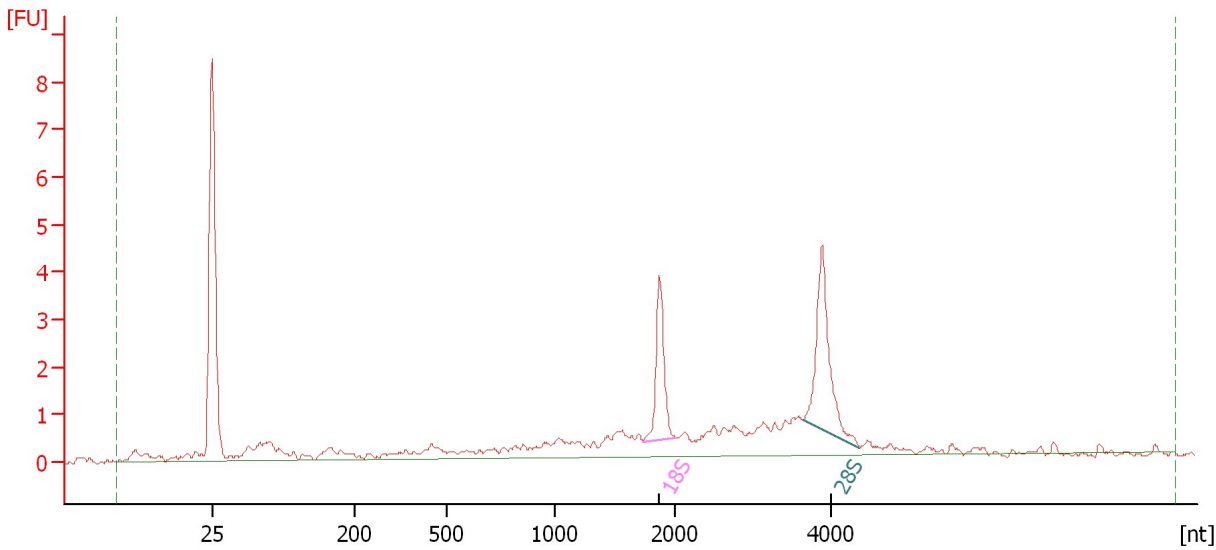
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,646	2,152	25.9	19.6
28S	3,229	4,388	40.3	30.4

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

48: 1958 [HiSeq_753 Total RNA QC]



Overall Results for sample 11 : 48: 1958

RNA Area:	34.3	RNA Integrity Number (RIN):	7.7 (B.02.08)
RNA Concentration:	26 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.6	Result Flagging Label:	RIN: 7.70

Fragment table for sample 11 : 48: 1958

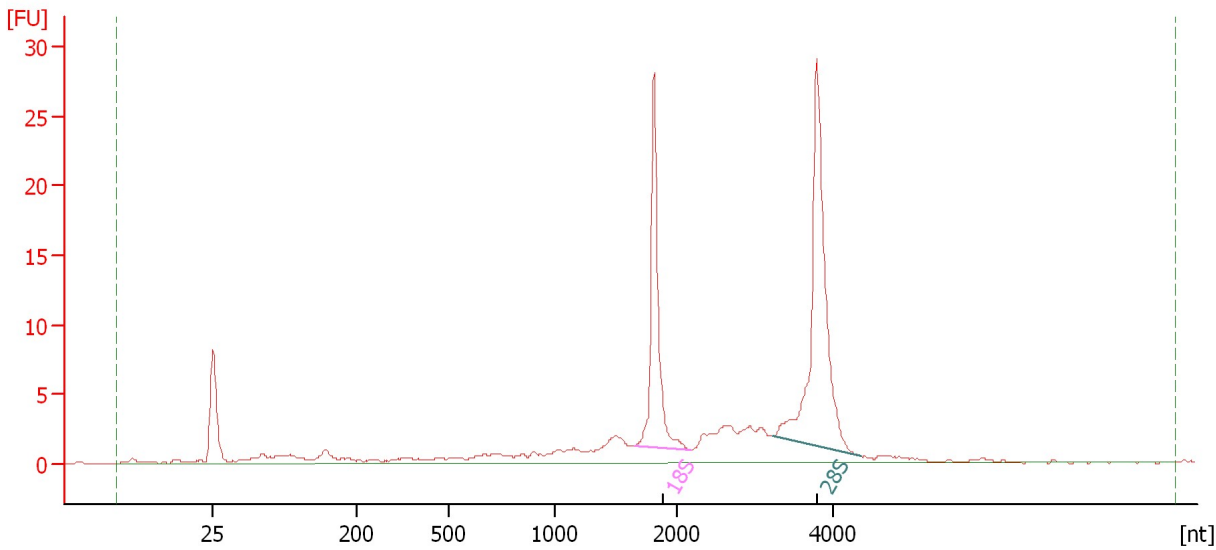
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,744	2,015	3.1	9.1
28S	3,638	4,361	5.0	14.6

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Electropherogram Summary Continued ...

49: 1969 [HiSeq_753 Total RNA QC]



Overall Results for sample 12 : 49: 1969

RNA Area: 128.8 RNA Integrity Number (RIN): 8.8 (B.02.08)
RNA Concentration: 99 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 8.80

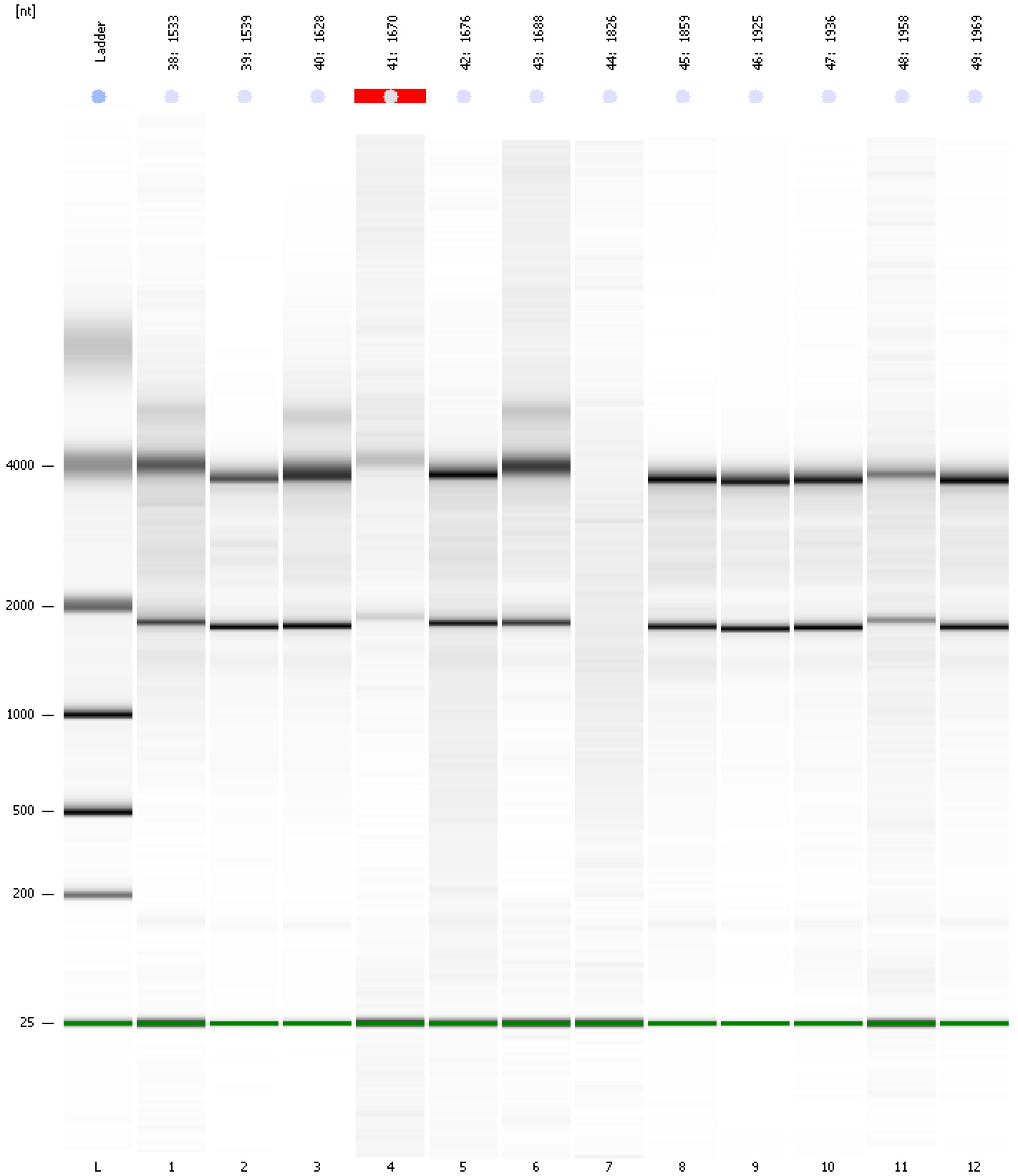
Fragment table for sample 12 : 49: 1969

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,657	2,180	23.9	18.6
28S	3,228	4,357	38.9	30.2

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
Modified: 11/18/2016 1:31:04 PM

Gel Image



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad

Created: 11/18/2016 1:08:01 PM
 Modified: 11/18/2016 1:31:04 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		11/18/2016 1:31:03 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-11-18\2016-11-18_004.xad)		Instrument	Run		11/18/2016 1:08:07 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/18/2016 1:08:07 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/18/2016 1:08:07 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/18/2016 1:08:07 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/18/2016 1:08:07 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/18/2016 1:08:07 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/18/2016 1:08:07 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1