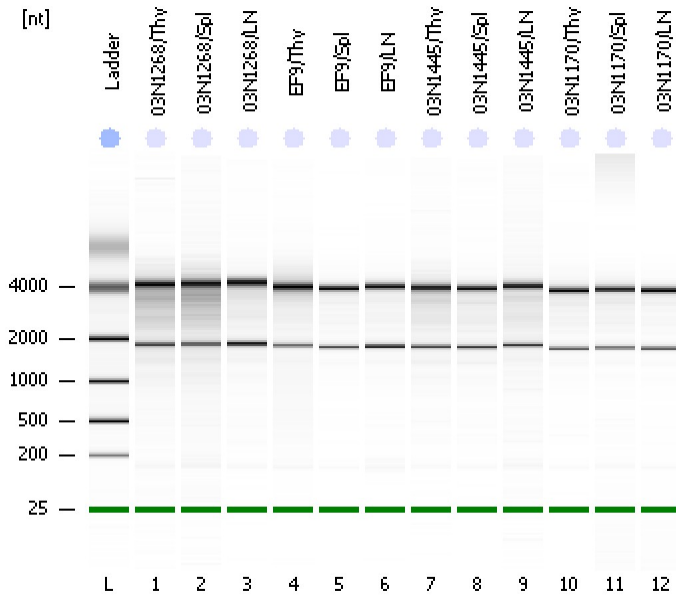


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

Electrophoresis File Run Summary



Instrument Information:

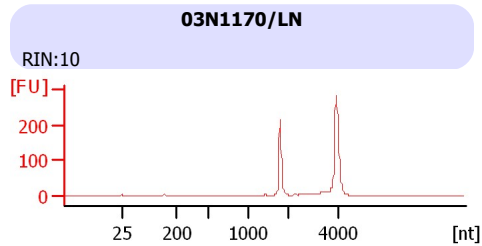
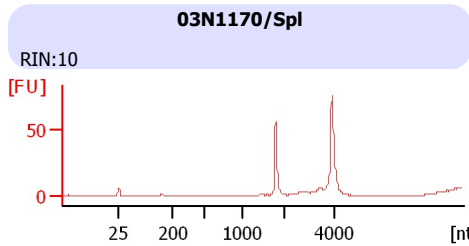
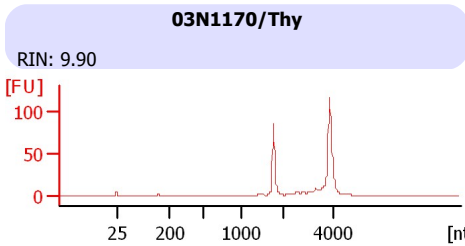
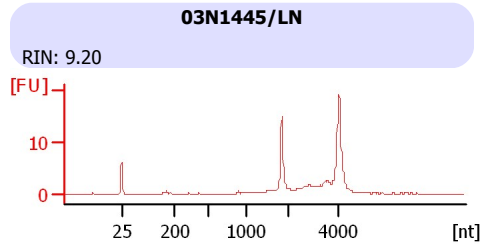
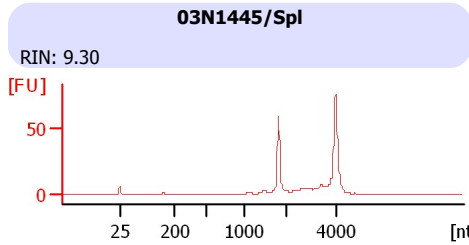
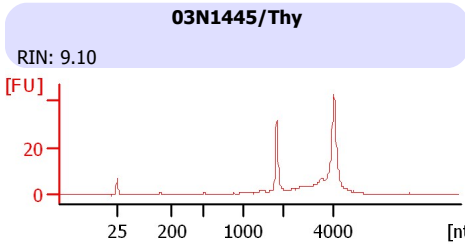
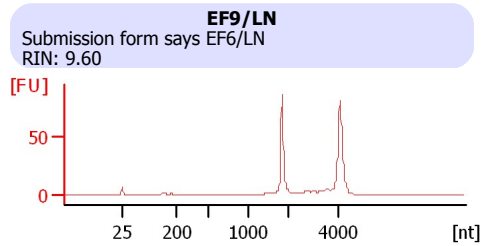
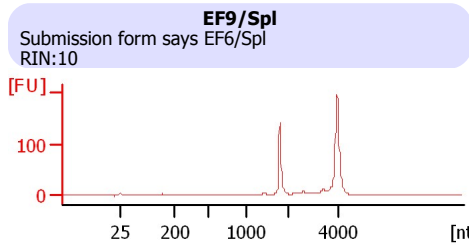
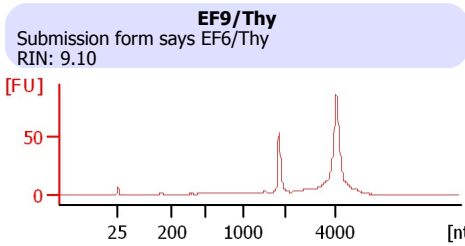
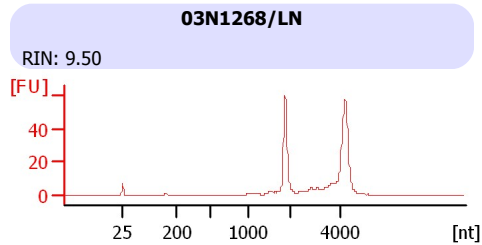
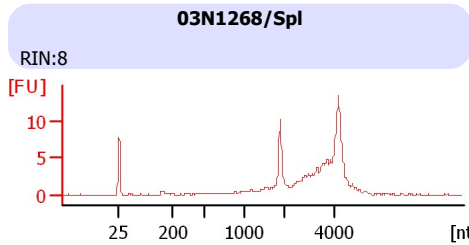
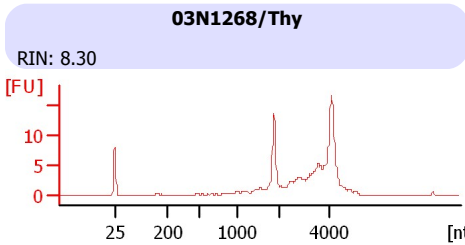
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
03N1268/Thy		✓	RIN: 8.30	
03N1268/Spl		✓	RIN:8	
03N1268/LN		✓	RIN: 9.50	
EF9/Thy	Submission form says EF6/Thy	✓	RIN: 9.10	
EF9/Spl	Submission form says EF6/Spl	✓	RIN:10	
EF9/LN	Submission form says EF6/LN	✓	RIN: 9.60	
03N1445/Thy		✓	RIN: 9.10	
03N1445/Spl		✓	RIN: 9.30	
03N1445/LN		✓	RIN: 9.20	
03N1170/Thy		✓	RIN: 9.90	
03N1170/Spl		✓	RIN:10	
03N1170/LN		✓	RIN:10	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 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

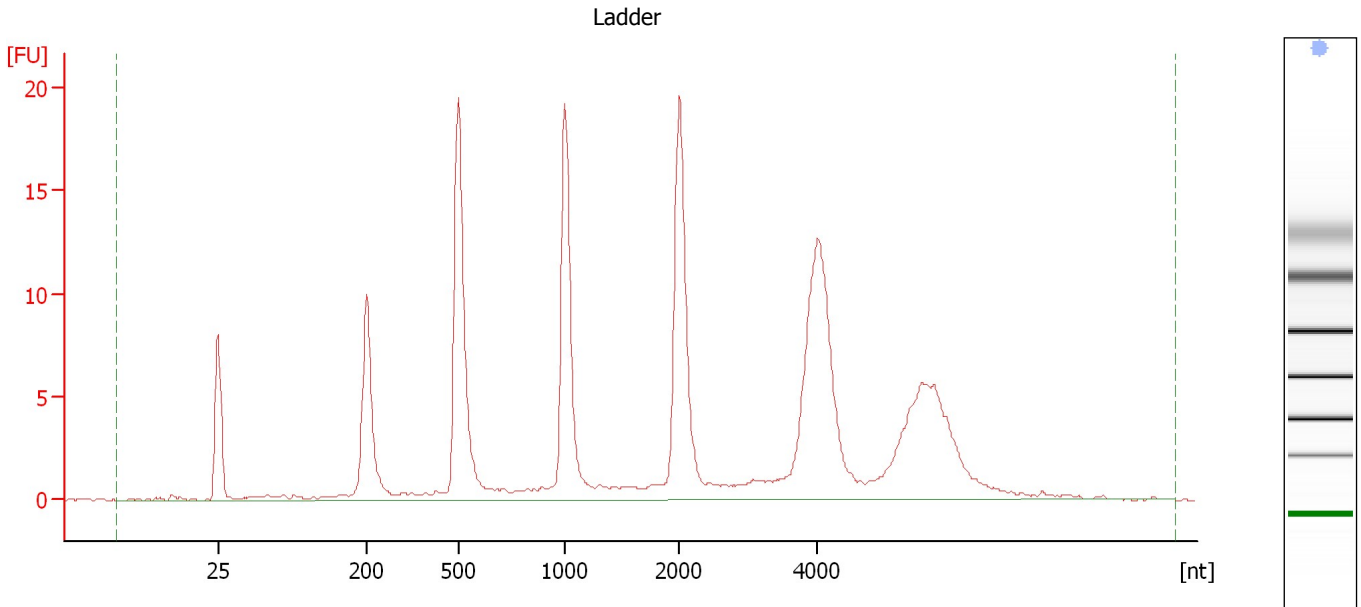
### Ladder

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\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary**



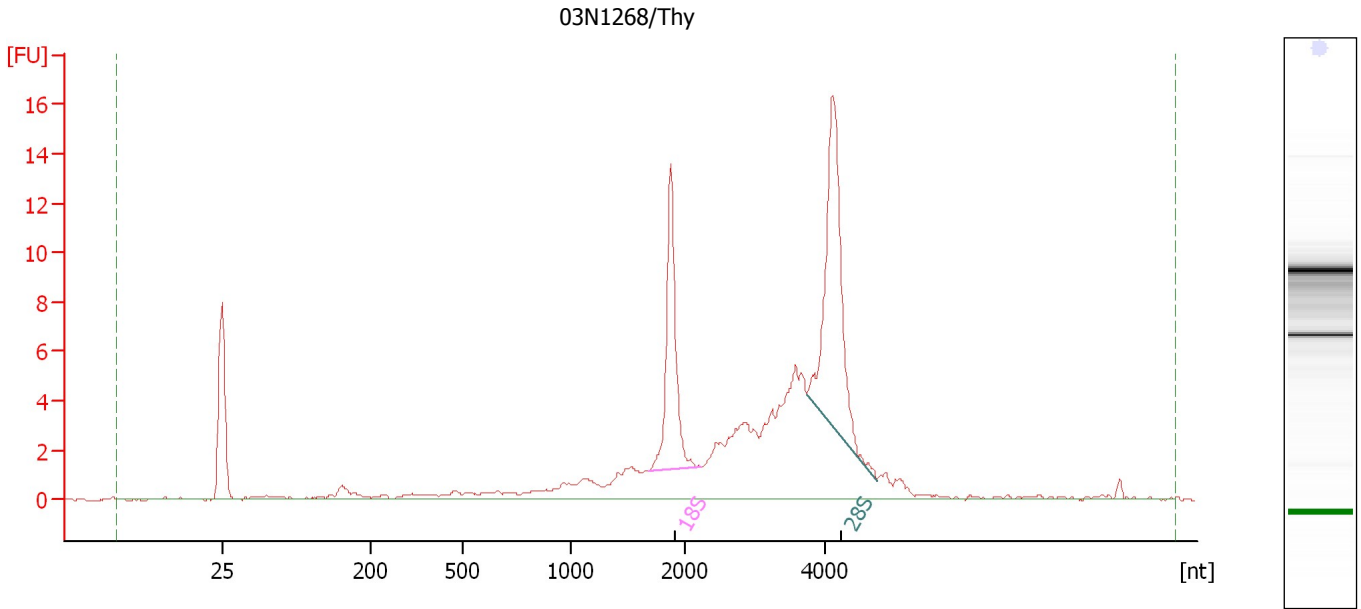
**Overall Results for Ladder**

RNA Area:	184.5	Result Flagging Color:	<span style="background-color: #6699ff; 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\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 03N1268/Thy**

RNA Area: 106.2                      RNA Integrity Number (RIN): 8.3 (B.02.08)  
RNA Concentration: 86 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6              Result Flagging Label: RIN: 8.30

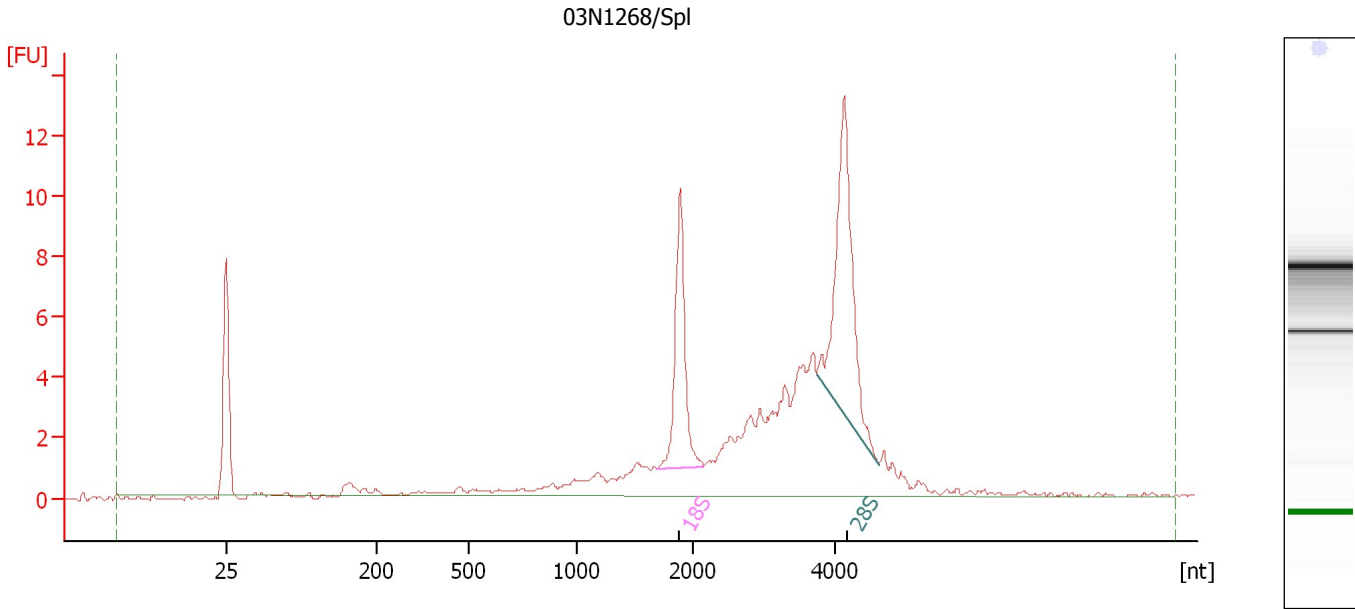
**Fragment table for sample 1 : 03N1268/Thy**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,678	2,234	13.5	12.8
28S	3,732	4,742	21.3	20.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 03N1268/Spl**

RNA Area: 88.4                      RNA Integrity Number (RIN): 8 (B.02.08)  
RNA Concentration: 72 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.7              Result Flagging Label: RIN:8

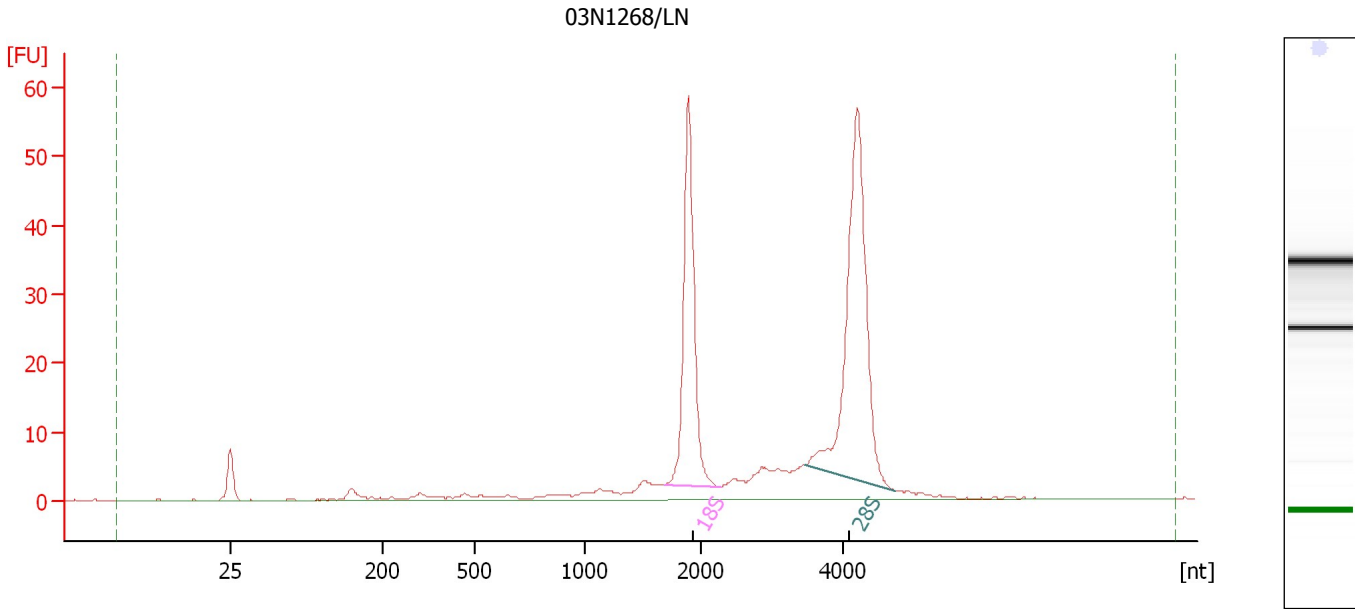
**Fragment table for sample 2 : 03N1268/Spl**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,693	2,148	10.3	11.6
28S	3,755	4,635	17.1	19.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 03N1268/LN**

RNA Area: 279.0                      RNA Integrity Number (RIN): 9.5 (B.02.08)  
RNA Concentration: 227 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5                      Result Flagging Label: RIN: 9.50

**Fragment table for sample 3 : 03N1268/LN**

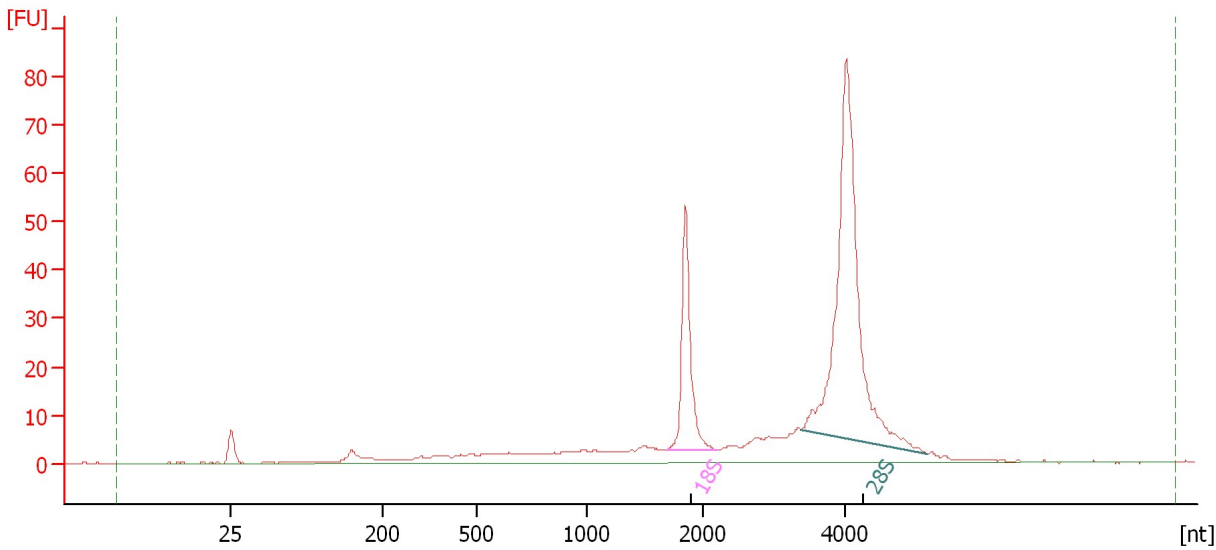
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,682	2,289	68.3	24.5
28S	3,462	4,741	102.9	36.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**

EF9/Thy [ Submission form says EF6/Thy ]



**Overall Results for sample 4 : EF9/Thy**

RNA Area: 385.9                      RNA Integrity Number (RIN): 9.1 (B.02.08)  
RNA Concentration: 314 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 3.0              Result Flagging Label: RIN: 9.10

**Fragment table for sample 4 : EF9/Thy**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,683	2,185	52.5	13.6
28S	3,386	5,142	159.9	41.4

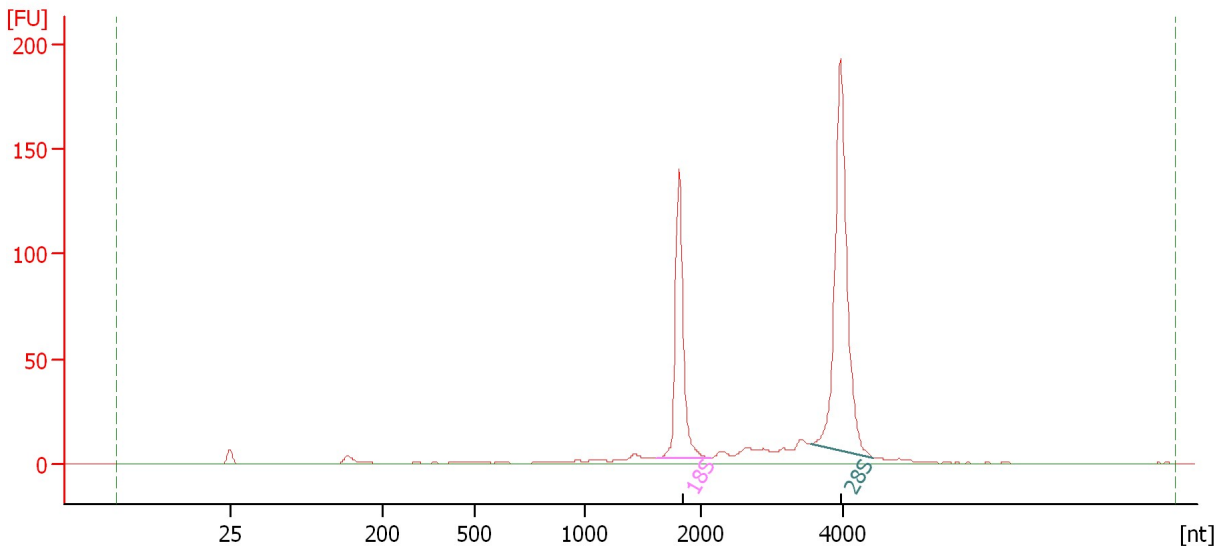


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**

EF9/Spl [ Submission form says EF6/Spl ]



**Overall Results for sample 5 : EF9/Spl**

RNA Area:	507.9	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	413 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]:	1.8	Result Flagging Label:	RIN:10

**Fragment table for sample 5 : EF9/Spl**

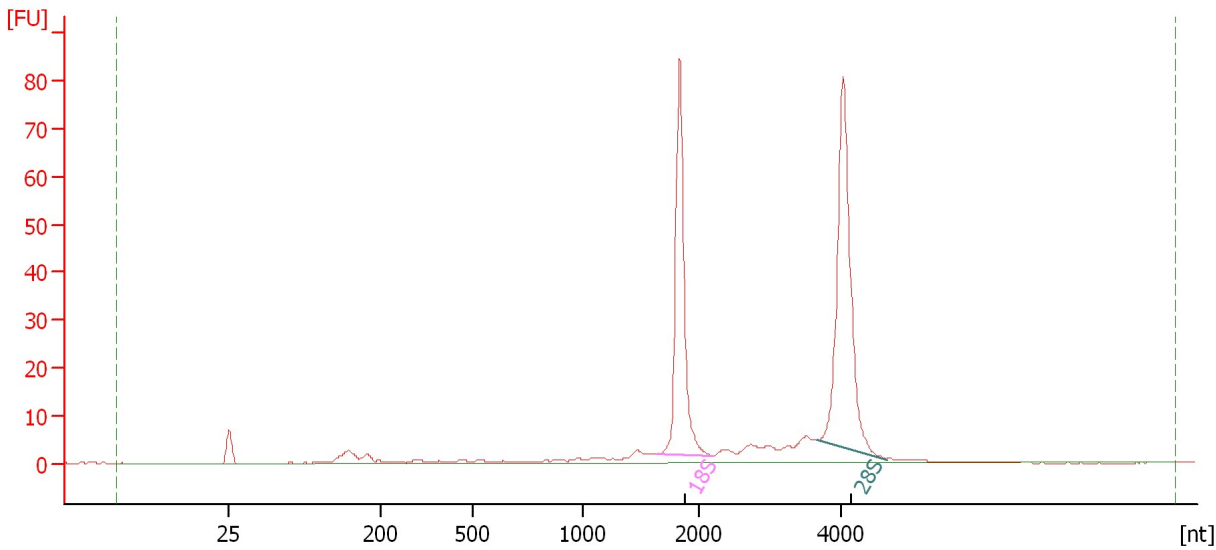
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,627	2,123	125.2	24.6
28S	3,537	4,410	228.5	45.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**

EF9/LN [ Submission form says EF6/LN ]



**Overall Results for sample 6 : EF9/LN**

RNA Area:	279.8	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	228 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]:	1.3	Result Flagging Label:	RIN: 9.60

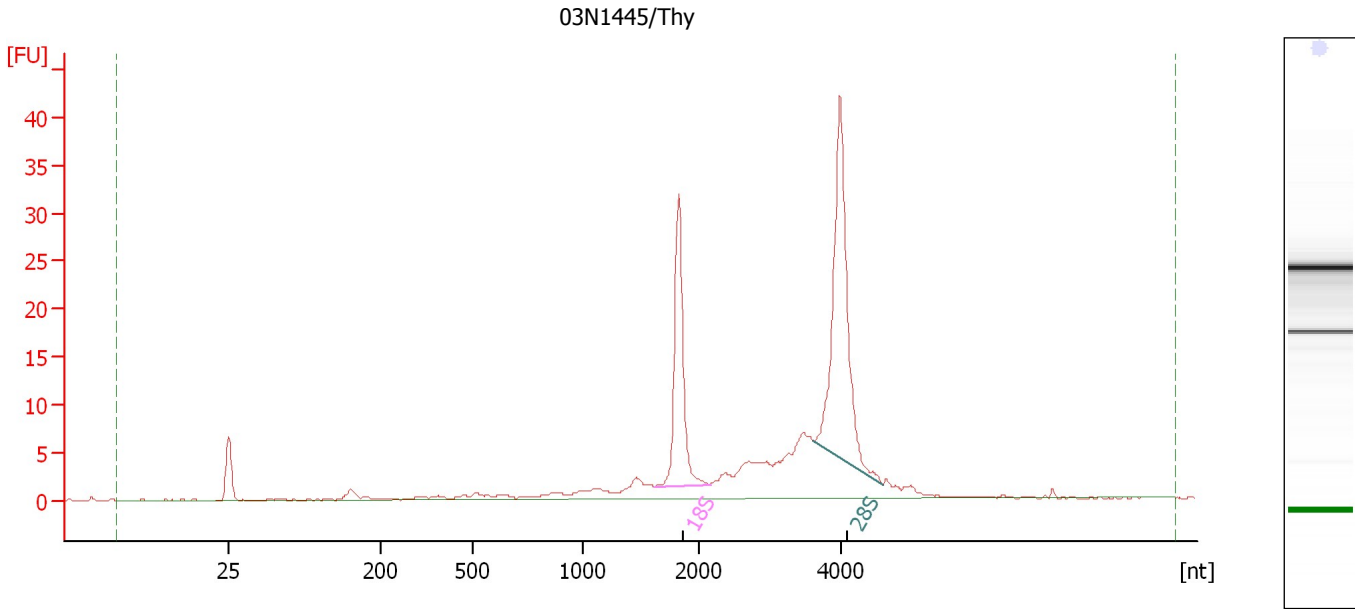
**Fragment table for sample 6 : EF9/LN**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	2,197	81.8	29.2
28S	3,659	4,639	104.0	37.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 03N1445/Thy**

RNA Area:	179.0	RNA Integrity Number (RIN):	9.1 (B.02.08)
RNA Concentration:	146 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]:	1.8	Result Flagging Label:	RIN: 9.10

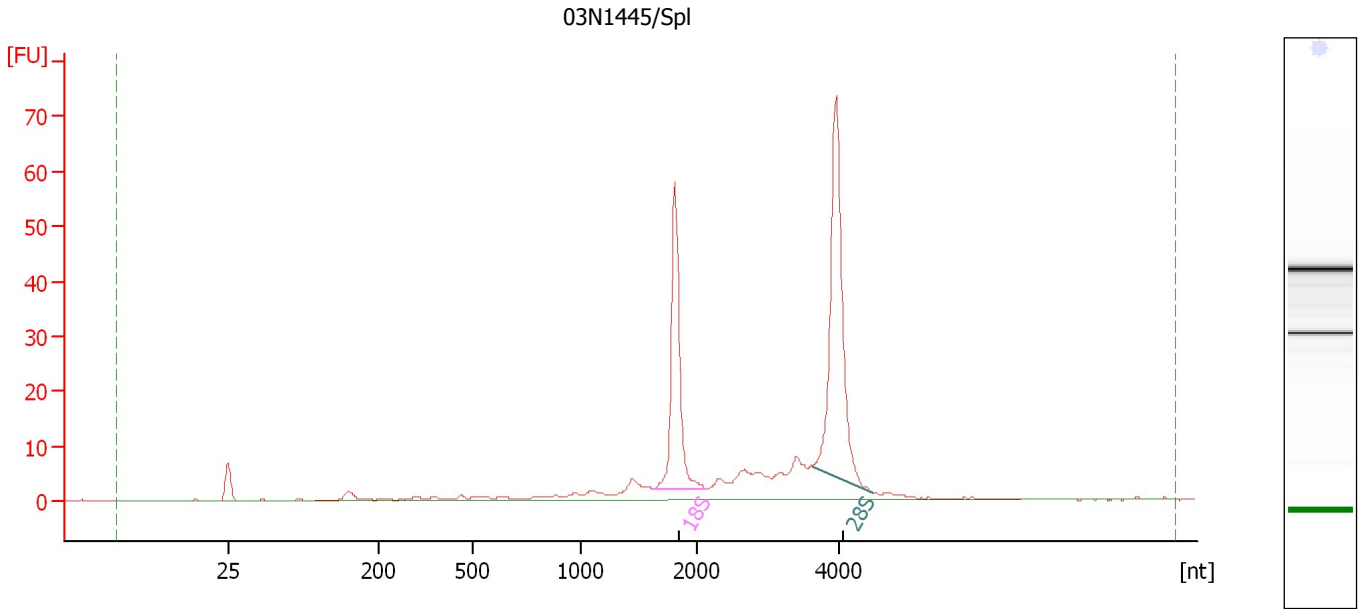
**Fragment table for sample 7 : 03N1445/Thy**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,625	2,152	29.6	16.5
28S	3,614	4,579	52.3	29.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 03N1445/Spl**

RNA Area:	242.2	RNA Integrity Number (RIN):	9.3 (B.02.08)
RNA Concentration:	197 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]:	1.6	Result Flagging Label:	RIN: 9.30

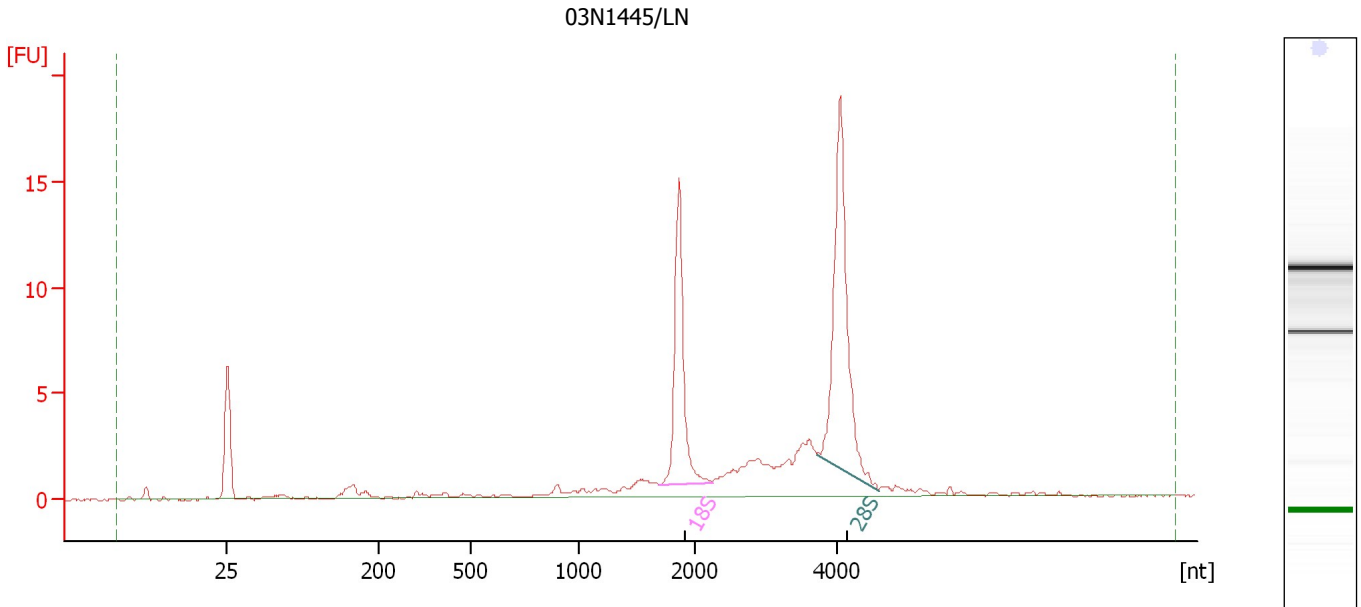
**Fragment table for sample 8 : 03N1445/Spl**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,623	2,135	52.8	21.8
28S	3,631	4,477	81.8	33.8

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 03N1445/LN**

RNA Area: 74.4                      RNA Integrity Number (RIN): 9.2 (B.02.08)  
RNA Concentration: 61 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6              Result Flagging Label: RIN: 9.20

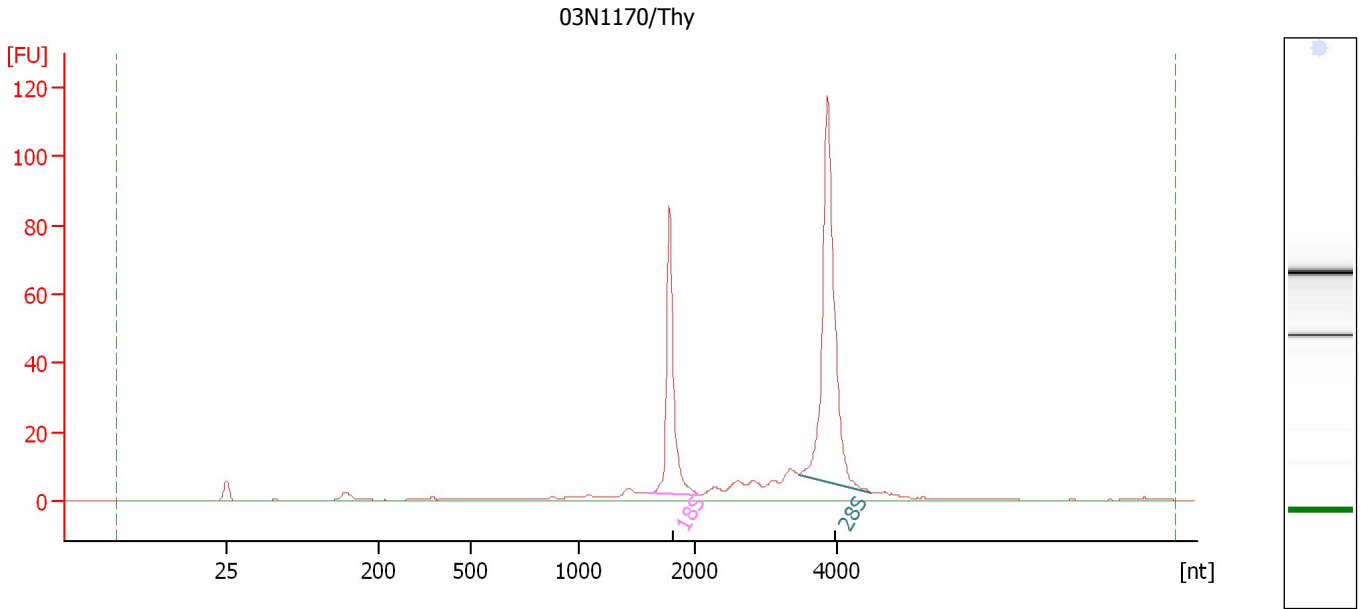
**Fragment table for sample 9 : 03N1445/LN**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,695	2,240	14.1	18.9
28S	3,723	4,601	22.7	30.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 03N1170/Thy**

RNA Area: 342.0                      RNA Integrity Number (RIN): 9.9 (B.02.08)  
RNA Concentration: 278 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.9                      Result Flagging Label: RIN: 9.90

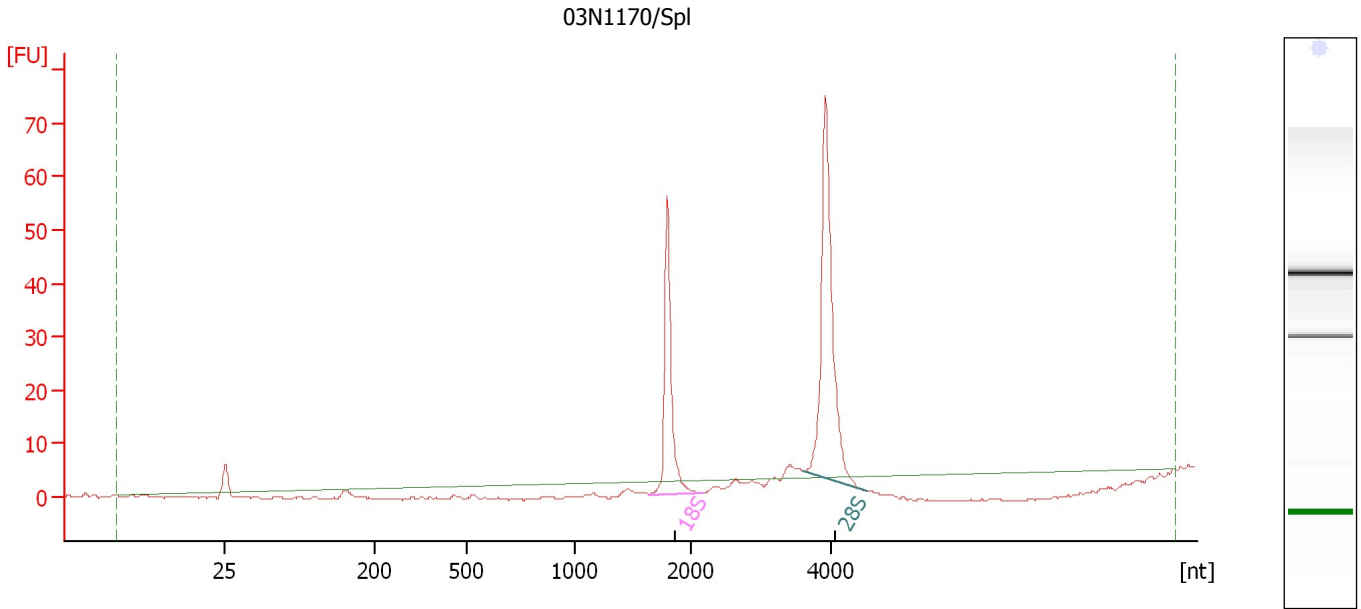
**Fragment table for sample 10 : 03N1170/Thy**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,594	2,058	71.8	21.0
28S	3,481	4,480	137.5	40.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 03N1170/Spl**

RNA Area: 120.8                      RNA Integrity Number (RIN): 10 (B.02.08)  
RNA Concentration: 98 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.8              Result Flagging Label: RIN:10

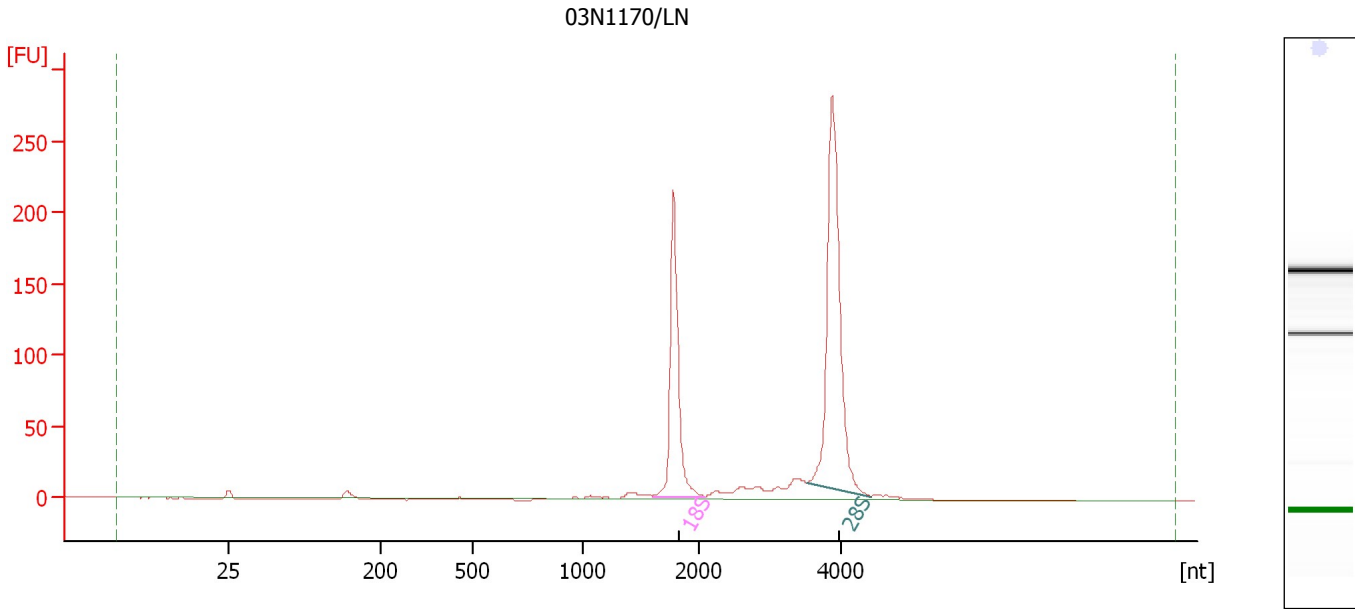
**Fragment table for sample 11 : 03N1170/Spl**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,627	2,177	46.4	38.4
28S	3,590	4,487	81.8	67.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 03N1170/LN**

RNA Area: 708.0                      RNA Integrity Number (RIN): 10 (B.02.08)  
RNA Concentration: 576 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.8              Result Flagging Label: RIN:10

**Fragment table for sample 12 : 03N1170/LN**

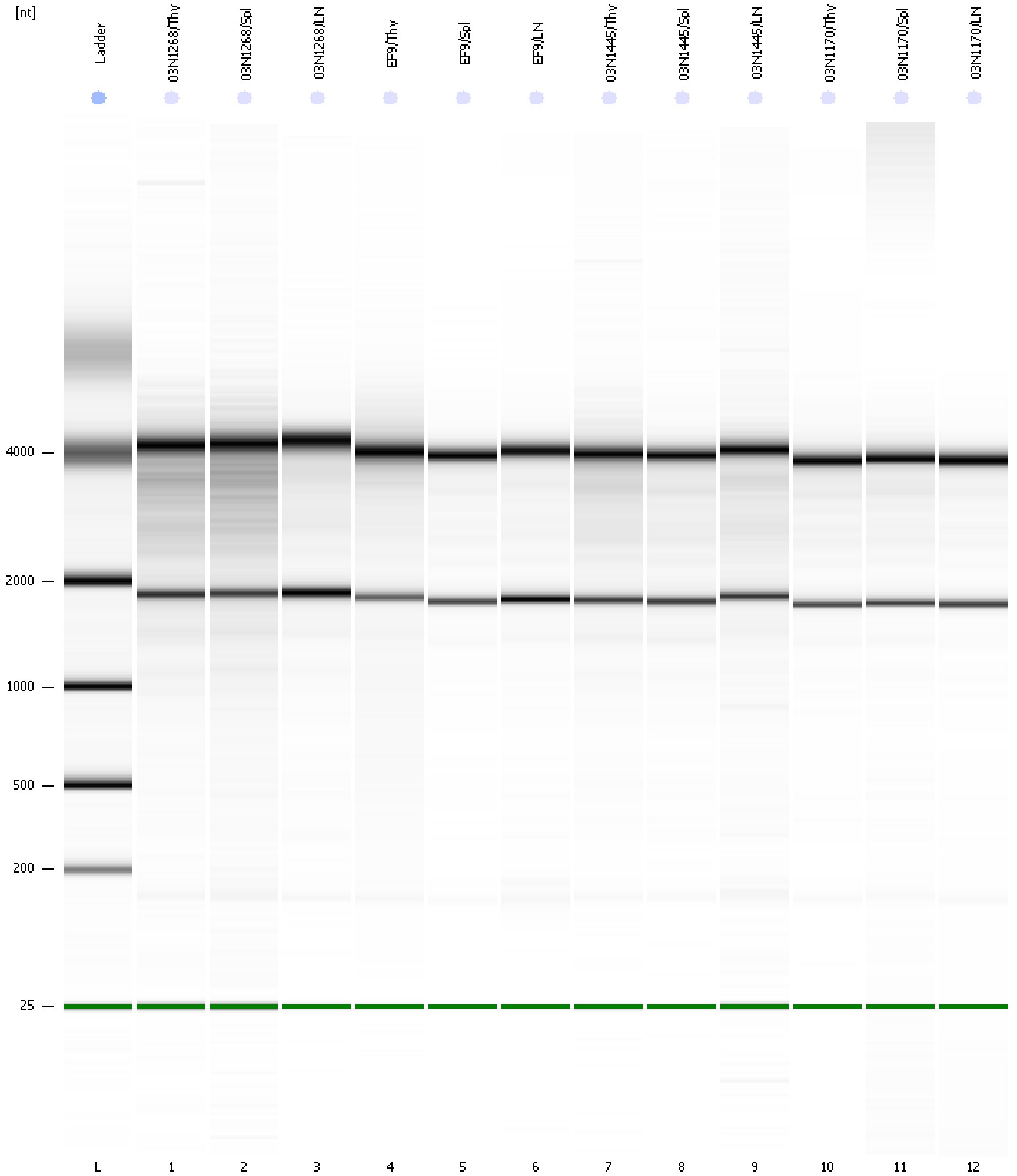
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,598	2,092	196.2	27.7
28S	3,524	4,413	347.9	49.1



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Gel Image**

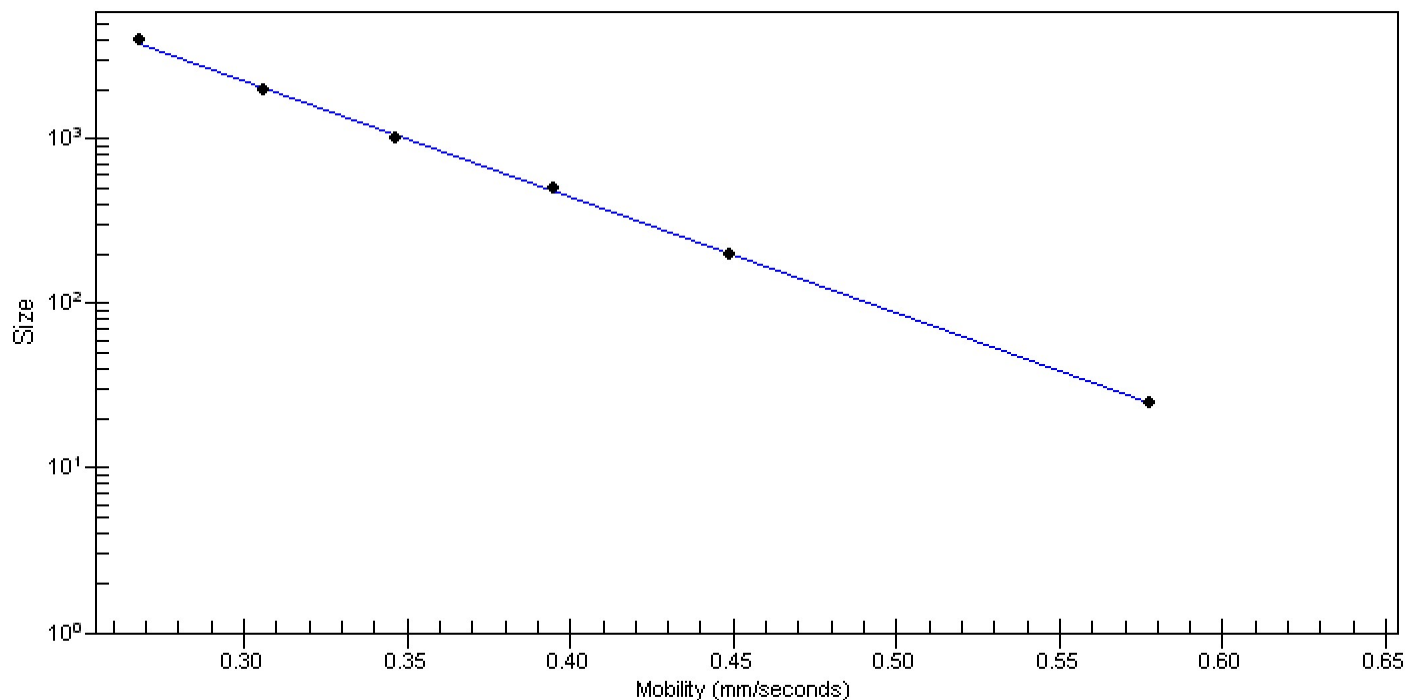


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
Modified: 9/24/2014 4:58:46 PM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2014-09-24\2014-09-24\_005.xad

Created: 9/24/2014 2:14:04 PM  
 Modified: 9/24/2014 4:58:46 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		9/24/2014 2:37:54 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2014-09-24\2014-09-24_005.xad)		Instrument	Run		9/24/2014 2:14:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		9/24/2014 2:14:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/24/2014 2:14:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/24/2014 2:14:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		9/24/2014 2:14:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/24/2014 2:14:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/24/2014 2:14:10 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1