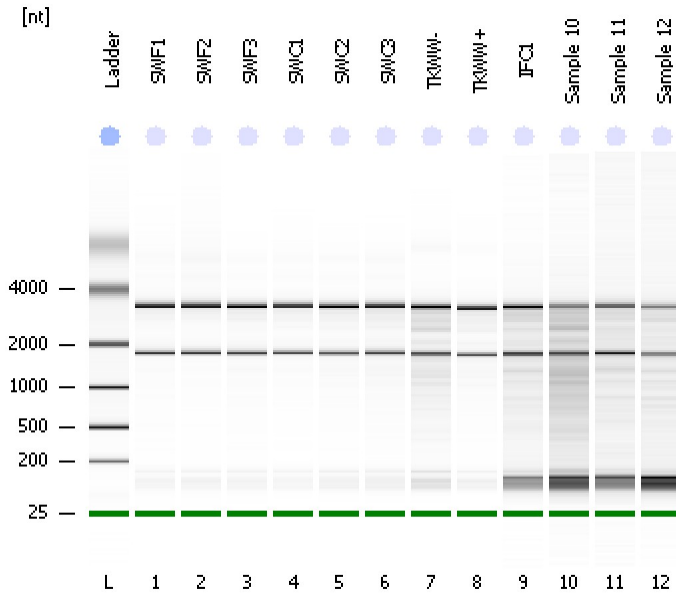


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

Electrophoresis File Run Summary



Instrument Information:

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

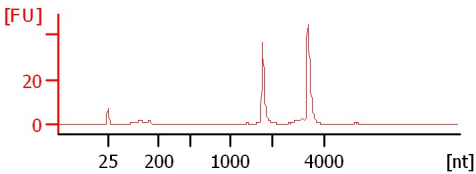
Assay Information:

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.

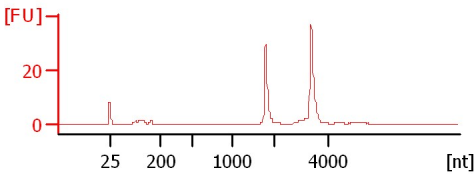
Chip Information:

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

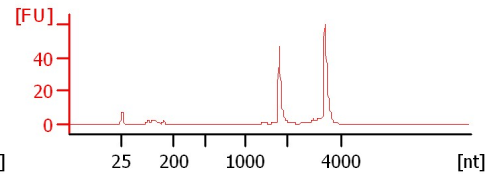
**SWF1**  
RIN: 9.80



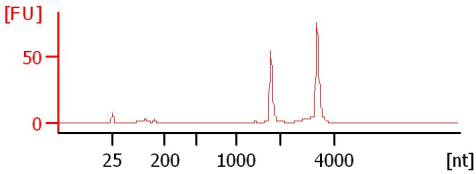
**SWF2**  
RIN: 10



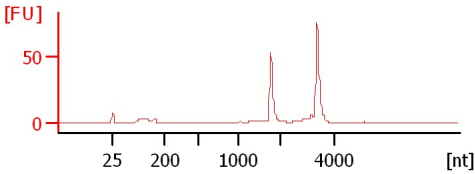
**SWF3**  
RIN: 9.70



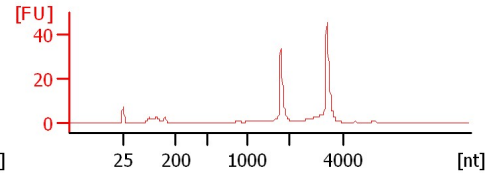
**SWC1**  
RIN: 9.80



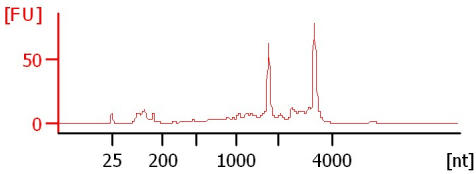
**SWC2**  
RIN: 9.40



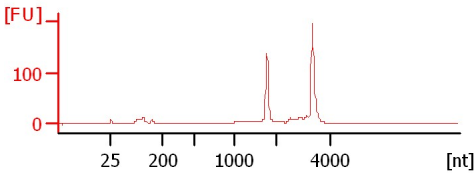
**SWC3**  
RIN: 9.30



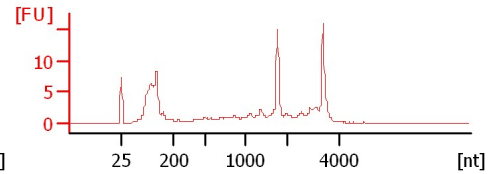
**TKWW-**  
RIN: 7.40



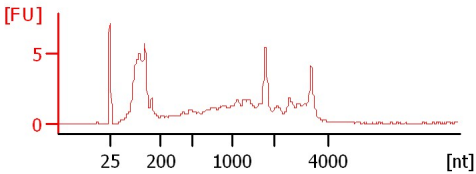
**TKWW+**  
RIN: 8.90



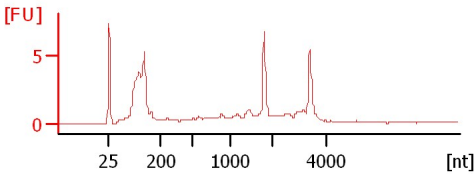
**IFC1**  
RIN: 7.10



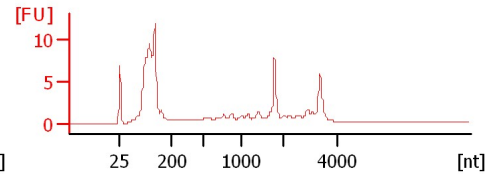
**Sample 10**  
RIN: 5.40



**Sample 11**  
RIN: 7



**Sample 12**  
RIN: 5.40



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
SWF1		✓	RIN: 9.80	
SWF2		✓	RIN:10	
SWF3		✓	RIN: 9.70	
SWC1		✓	RIN: 9.80	
SWC2		✓	RIN: 9.40	
SWC3		✓	RIN: 9.30	
TKWW-		✓	RIN: 7.40	
TKWW+		✓	RIN: 8.90	
IFC1		✓	RIN: 7.10	
Sample 10		✓	RIN: 5.40	
Sample 11		✓	RIN:7	
Sample 12		✓	RIN: 5.40	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 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

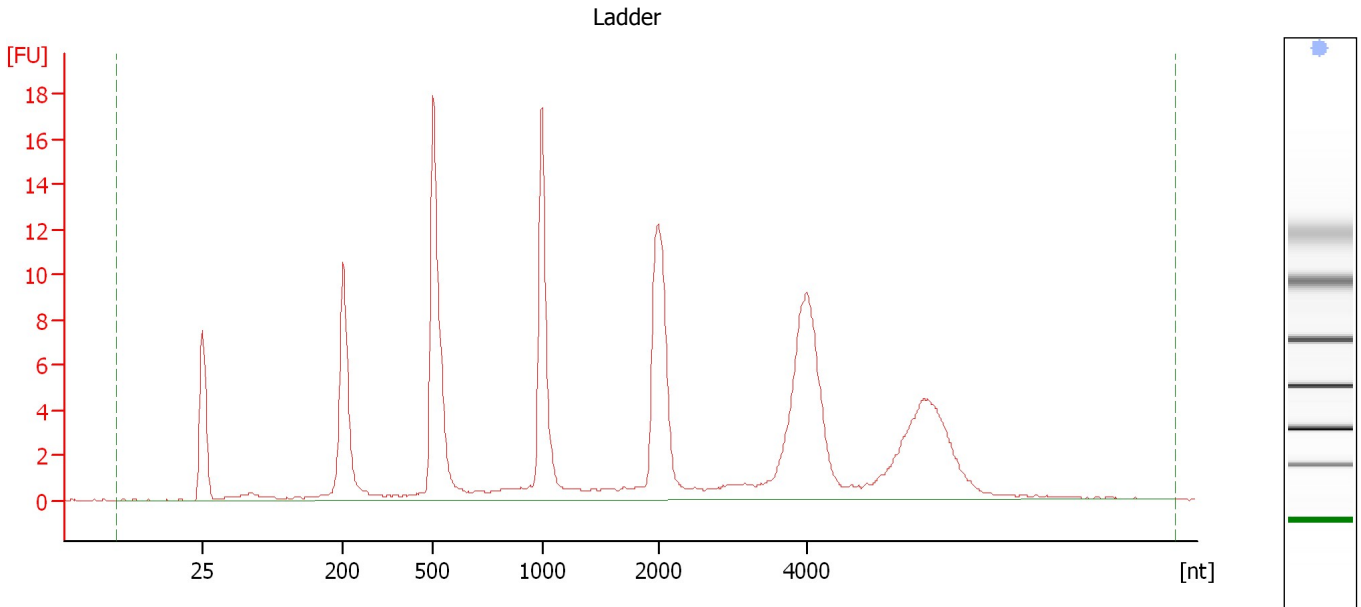
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary**



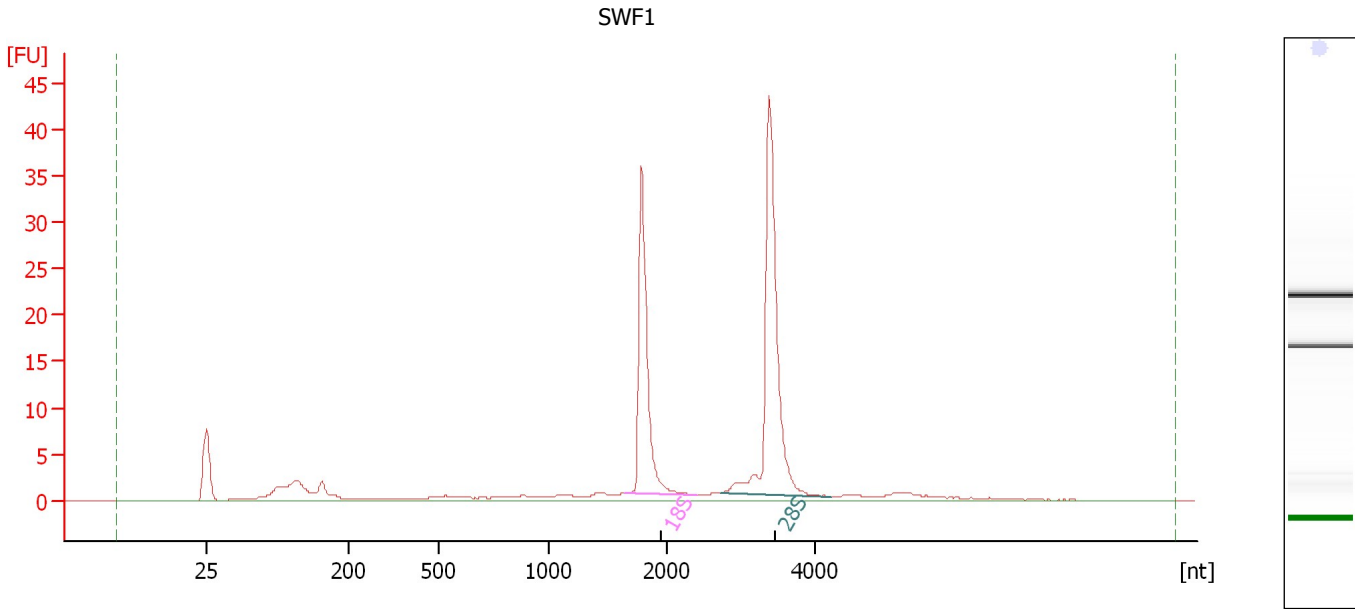
**Overall Results for Ladder**

RNA Area:	150.9	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:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : SWF1**

RNA Area:	136.6	RNA Integrity Number (RIN):	9.8 (B.02.08)
RNA Concentration:	136 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: 9.80

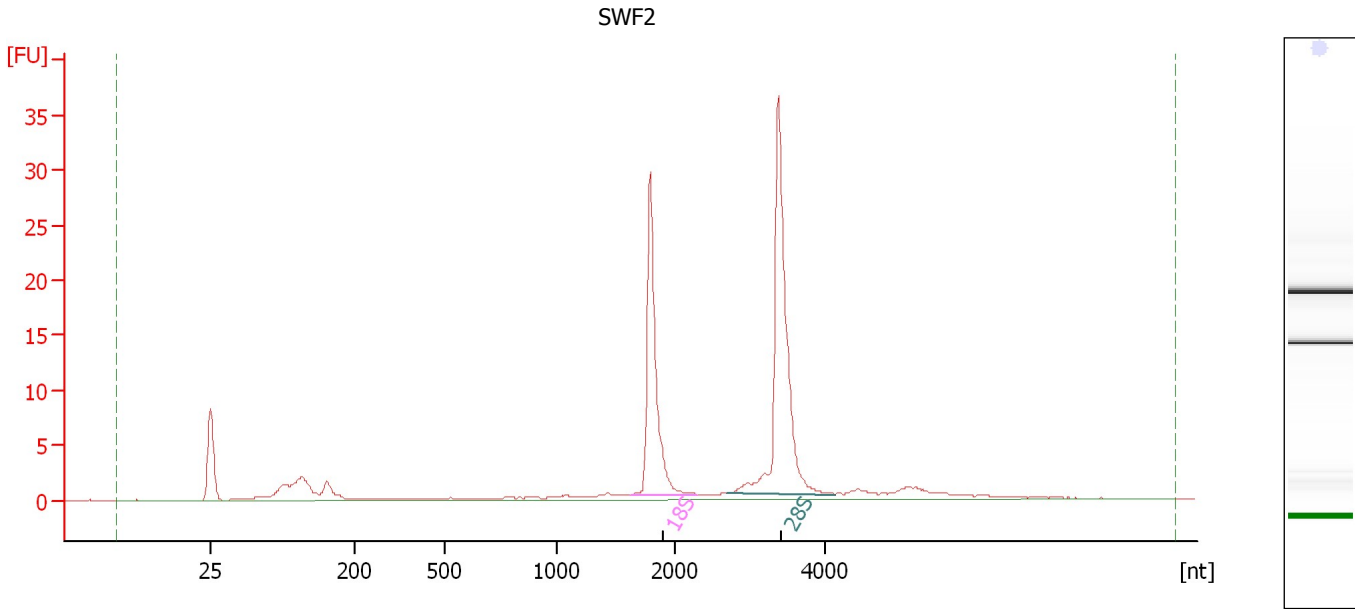
**Fragment table for sample 1 : SWF1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,648	2,393	34.9	25.5
28S	2,738	4,218	51.9	38.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : SWF2**

RNA Area:	114.0	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	113 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:10

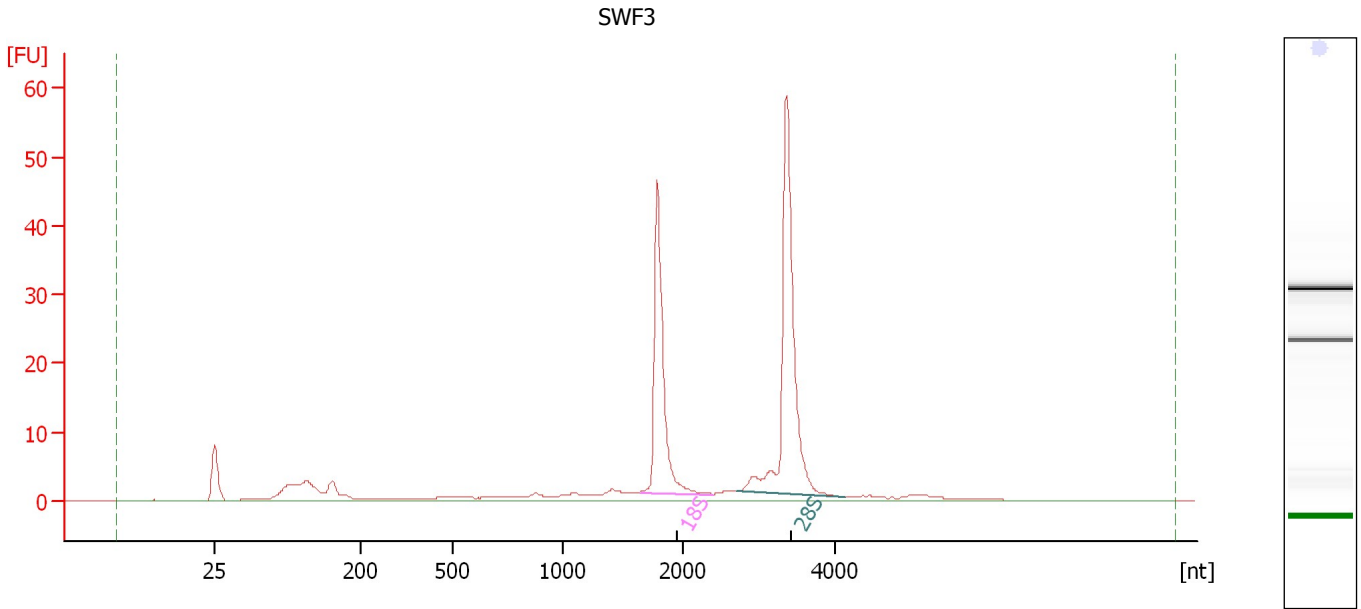
**Fragment table for sample 2 : SWF2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,627	2,295	30.7	26.9
28S	2,680	4,133	45.4	39.8

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : SWF3**

RNA Area: 186.5                      RNA Integrity Number (RIN): 9.7 (B.02.08)  
RNA Concentration: 185 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5              Result Flagging Label: RIN: 9.70

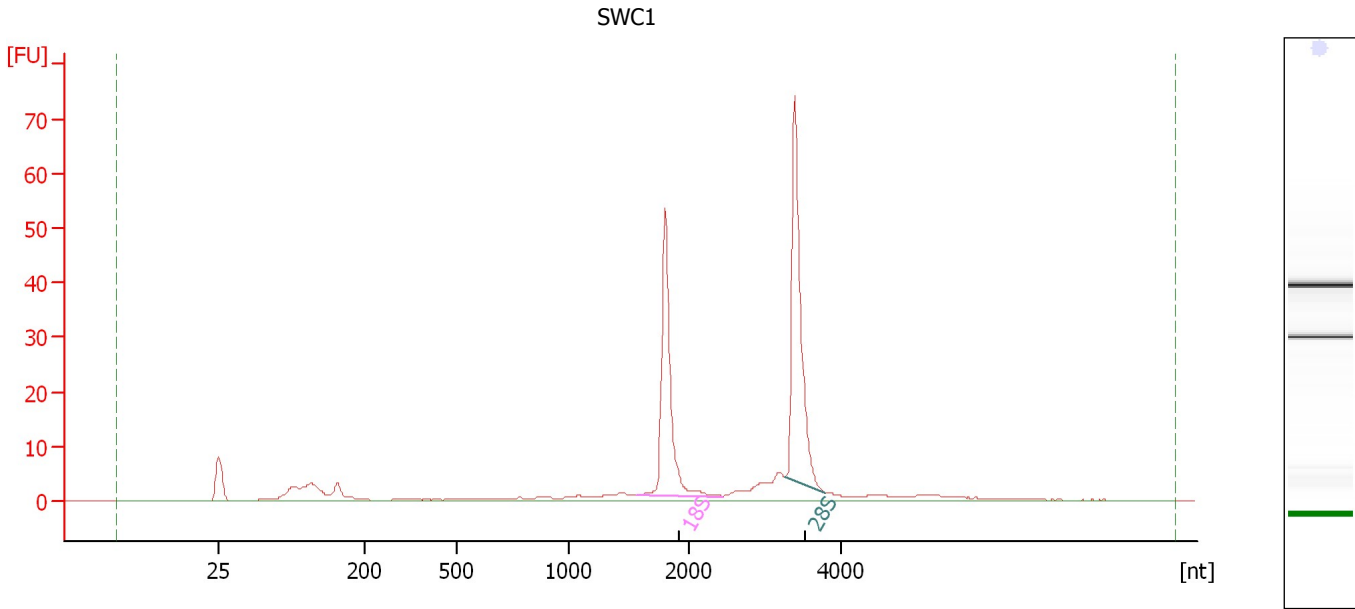
**Fragment table for sample 3 : SWF3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	2,382	46.0	24.6
28S	2,722	4,149	68.4	36.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
 Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : SWC1**

RNA Area:	209.9	RNA Integrity Number (RIN):	9.8 (B.02.08)
RNA Concentration:	209 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]:	1.2	Result Flagging Label:	RIN: 9.80

**Fragment table for sample 4 : SWC1**

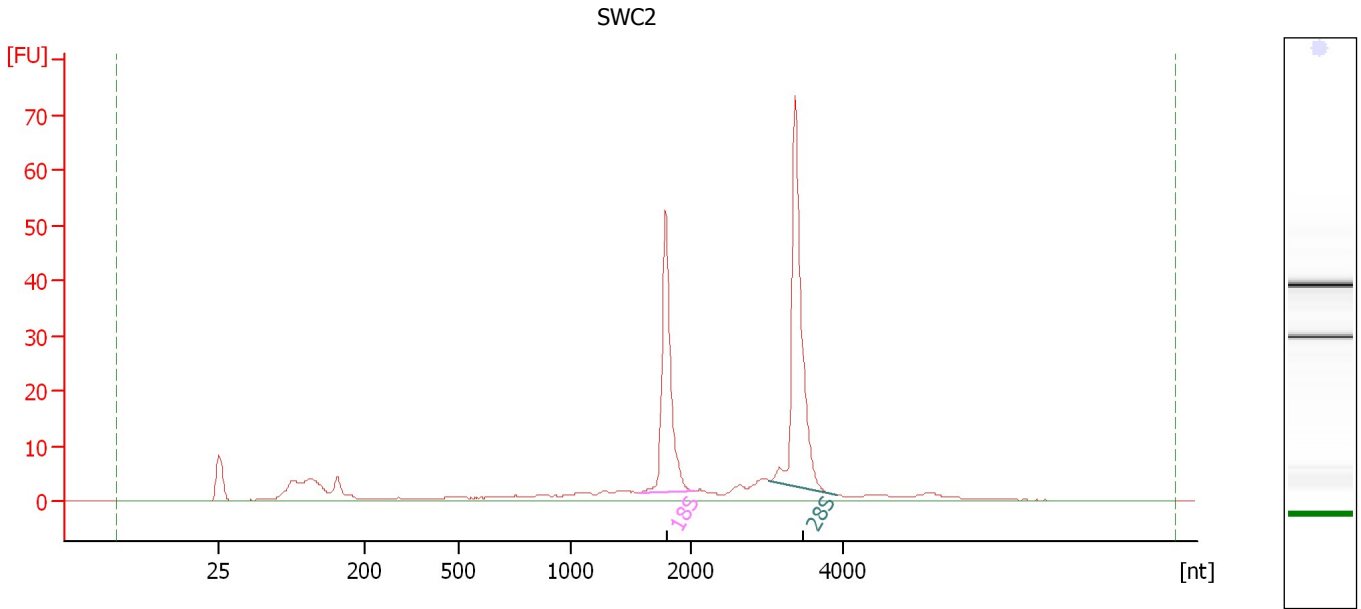
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,567	2,440	54.0	25.7
28S	3,255	3,774	66.3	31.6



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : SWC2**

RNA Area:	245.2	RNA Integrity Number (RIN):	9.4 (B.02.08)
RNA Concentration:	244 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]:	1.4	Result Flagging Label:	RIN: 9.40

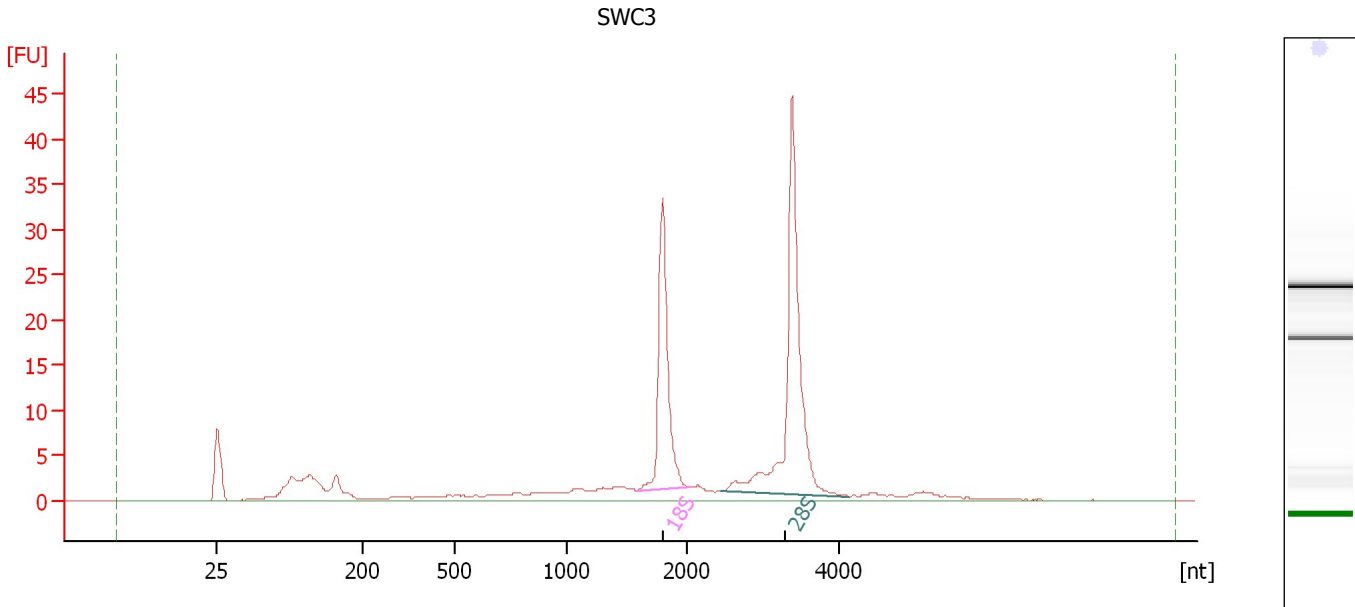
**Fragment table for sample 5 : SWC2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,560	2,034	52.9	21.6
28S	3,029	3,898	73.2	29.8

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
 Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : SWC3**

RNA Area:	170.0	RNA Integrity Number (RIN):	9.3 (B.02.08)
RNA Concentration:	169 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]:	1.7	Result Flagging Label:	RIN: 9.30

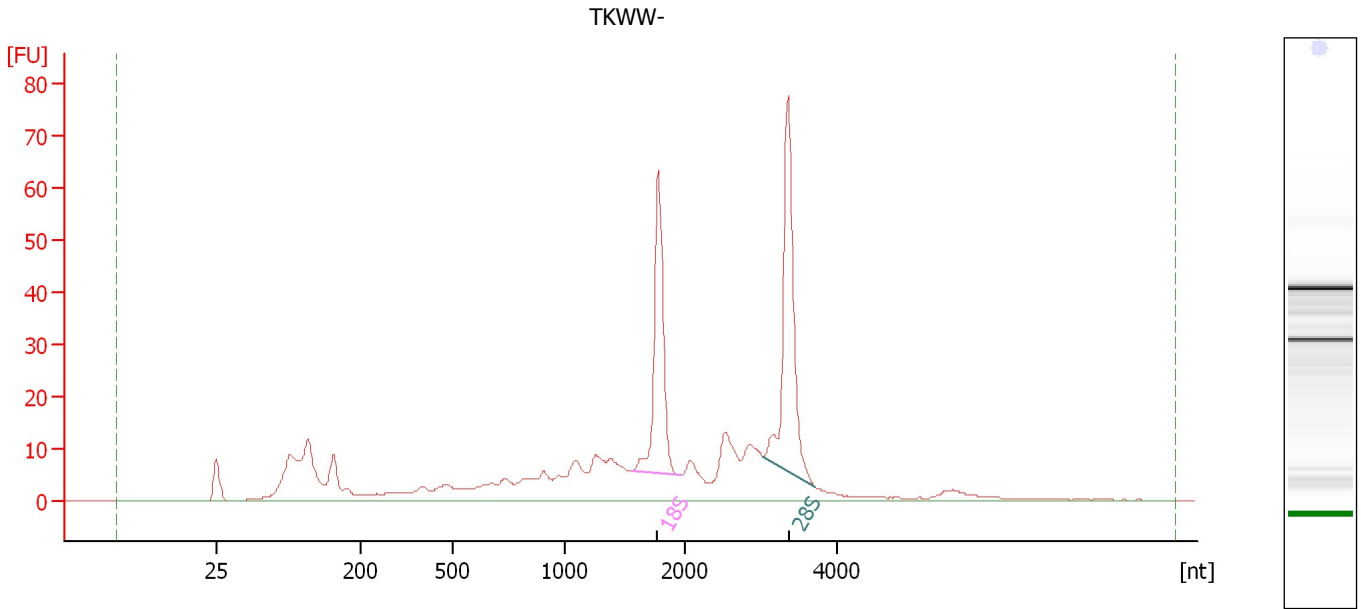
**Fragment table for sample 6 : SWC3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,574	2,046	34.1	20.0
28S	2,454	4,129	57.5	33.8

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : TKWW-**

RNA Area:	470.8	RNA Integrity Number (RIN):	7.4 (B.02.08)
RNA Concentration:	468 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]:	1.2	Result Flagging Label:	RIN: 7.40

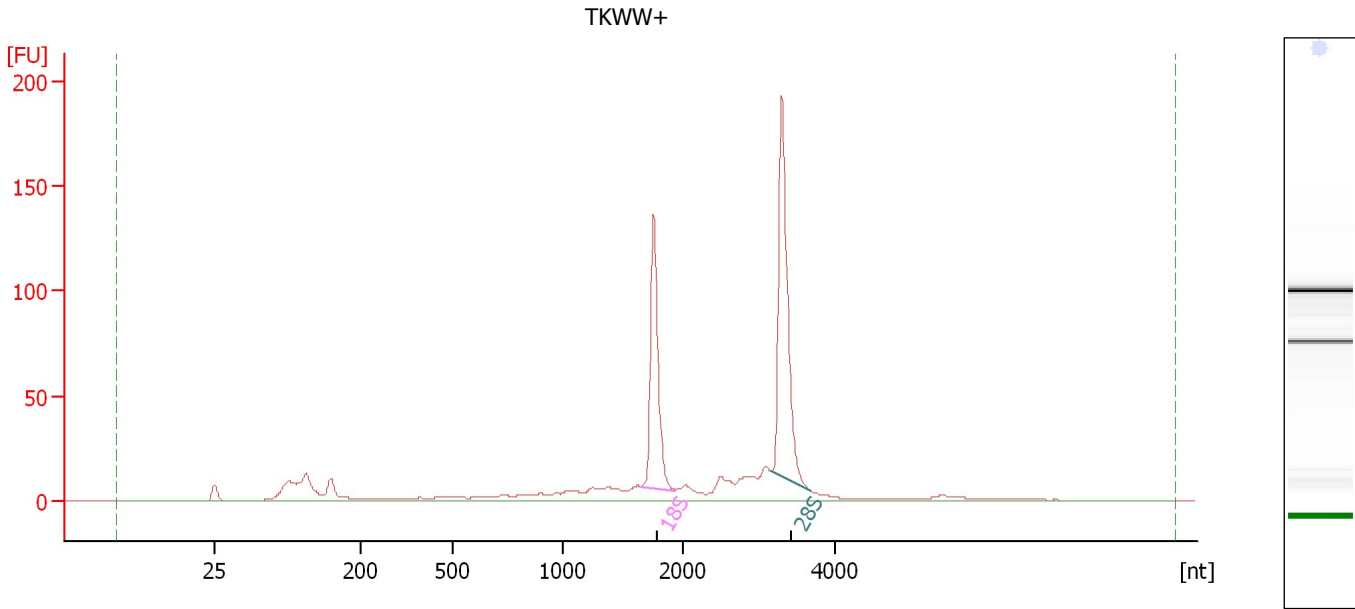
**Fragment table for sample 7 : TKWW-**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,555	1,957	61.8	13.1
28S	3,032	3,723	76.2	16.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
 Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : TKWW+**

RNA Area:	633.1	RNA Integrity Number (RIN):	8.9 (B.02.08)
RNA Concentration:	629 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]:	1.4	Result Flagging Label:	RIN: 8.90

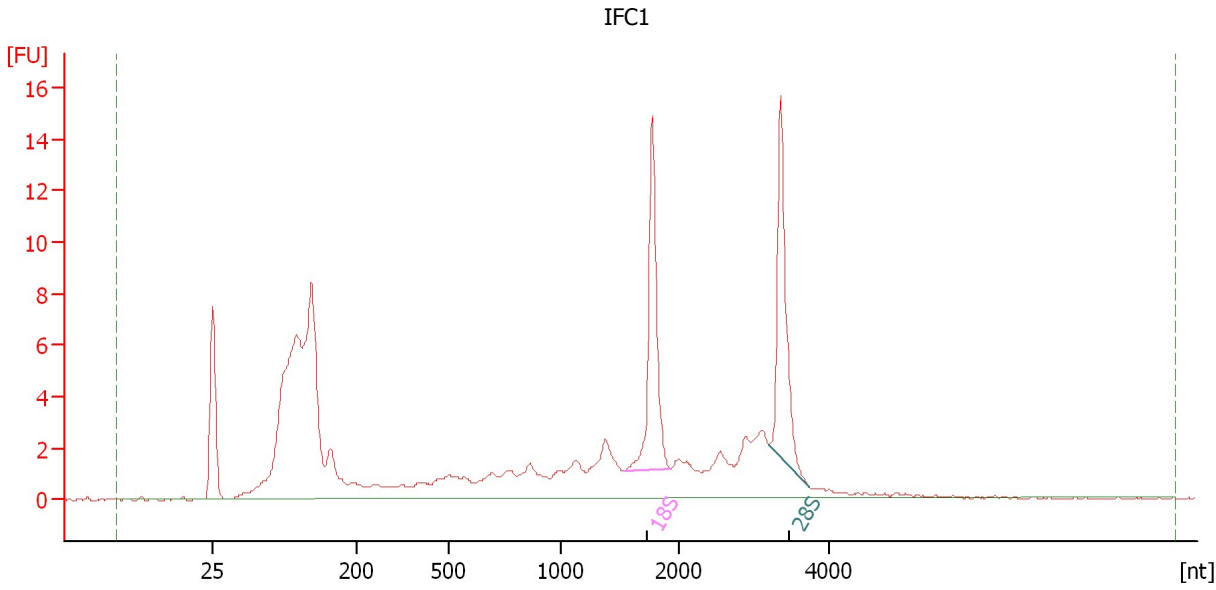
**Fragment table for sample 8 : TKWW+**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	1,938	121.0	19.1
28S	3,160	3,697	172.5	27.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : IFC1**

RNA Area:	135.0	RNA Integrity Number (RIN):	7.1 (B.02.08)
RNA Concentration:	134 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: 7.10

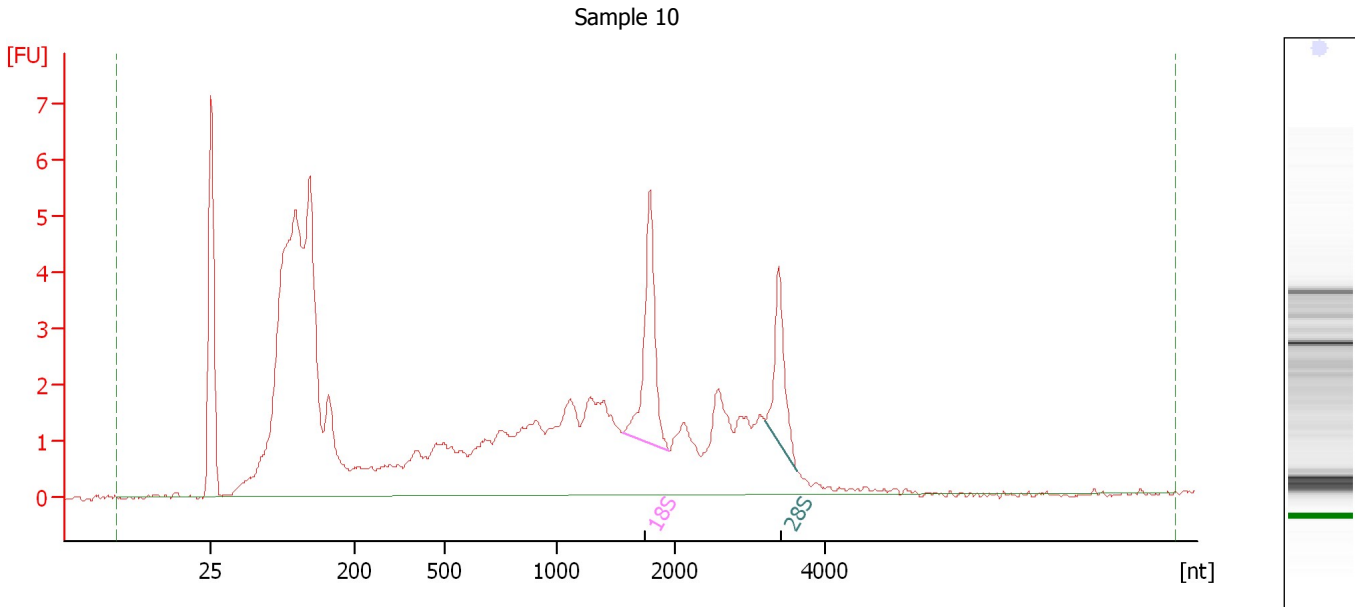
**Fragment table for sample 9 : IFC1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,550	1,927	13.9	10.3
28S	3,205	3,715	12.7	9.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
 Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Sample 10**

RNA Area:	101.9	RNA Integrity Number (RIN):	5.4 (B.02.08)
RNA Concentration:	101 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]:	0.6	Result Flagging Label:	RIN: 5.40

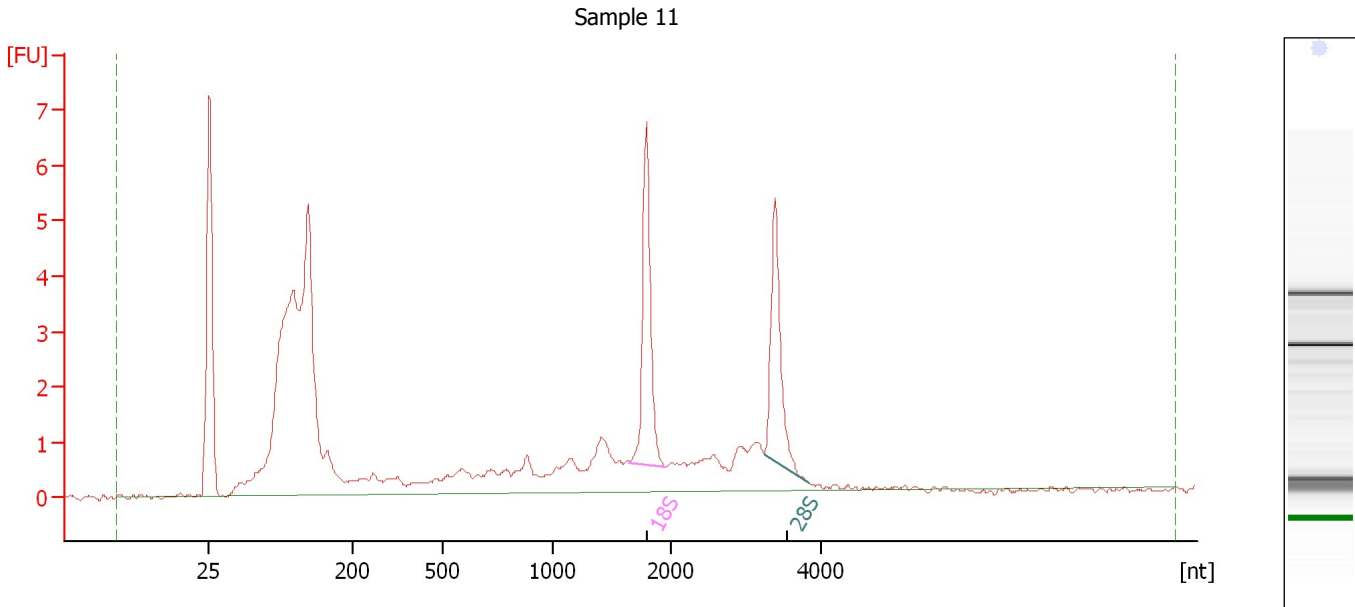
**Fragment table for sample 10 : Sample 10**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,555	1,952	5.8	5.7
28S	3,207	3,634	3.3	3.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
 Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Sample 11**

RNA Area:	64.6	RNA Integrity Number (RIN):	7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	64 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:7

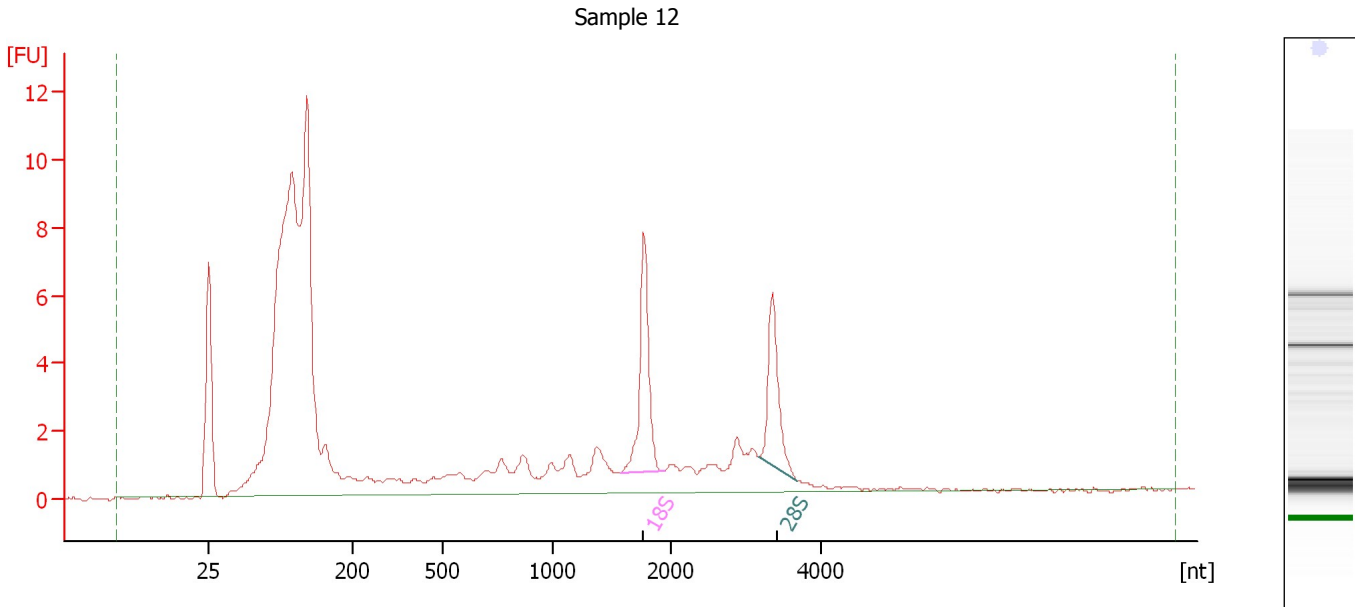
**Fragment table for sample 11 : Sample 11**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,651	1,941	5.6	8.7
28S	3,252	3,853	4.8	7.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
 Modified: 7/31/2014 4:11:07 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : Sample 12**

RNA Area:	117.9	RNA Integrity Number (RIN):	5.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	117 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: 5.40

**Fragment table for sample 12 : Sample 12**

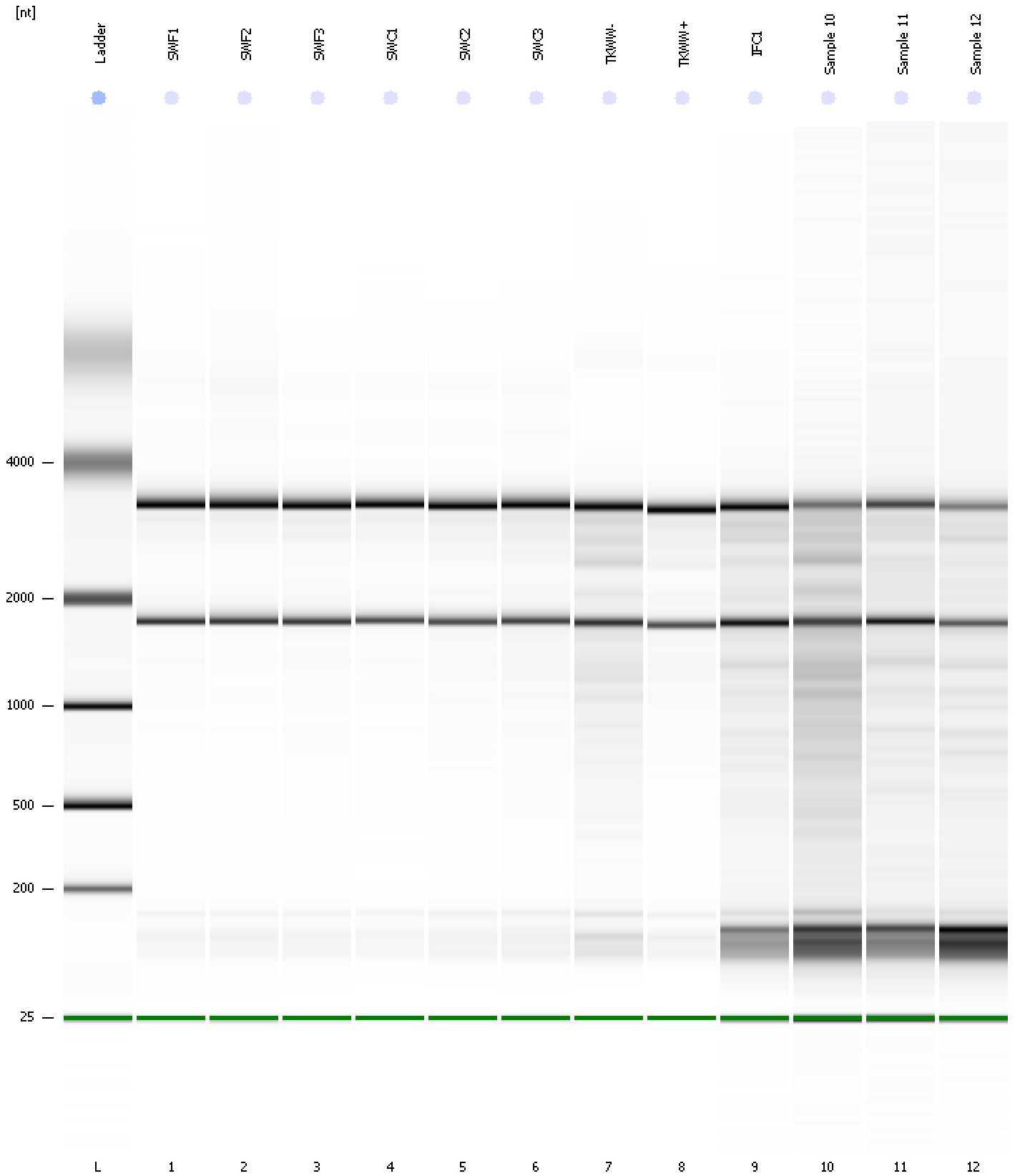
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,570	1,941	7.4	6.2
28S	3,166	3,696	5.4	4.6



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Gel Image**

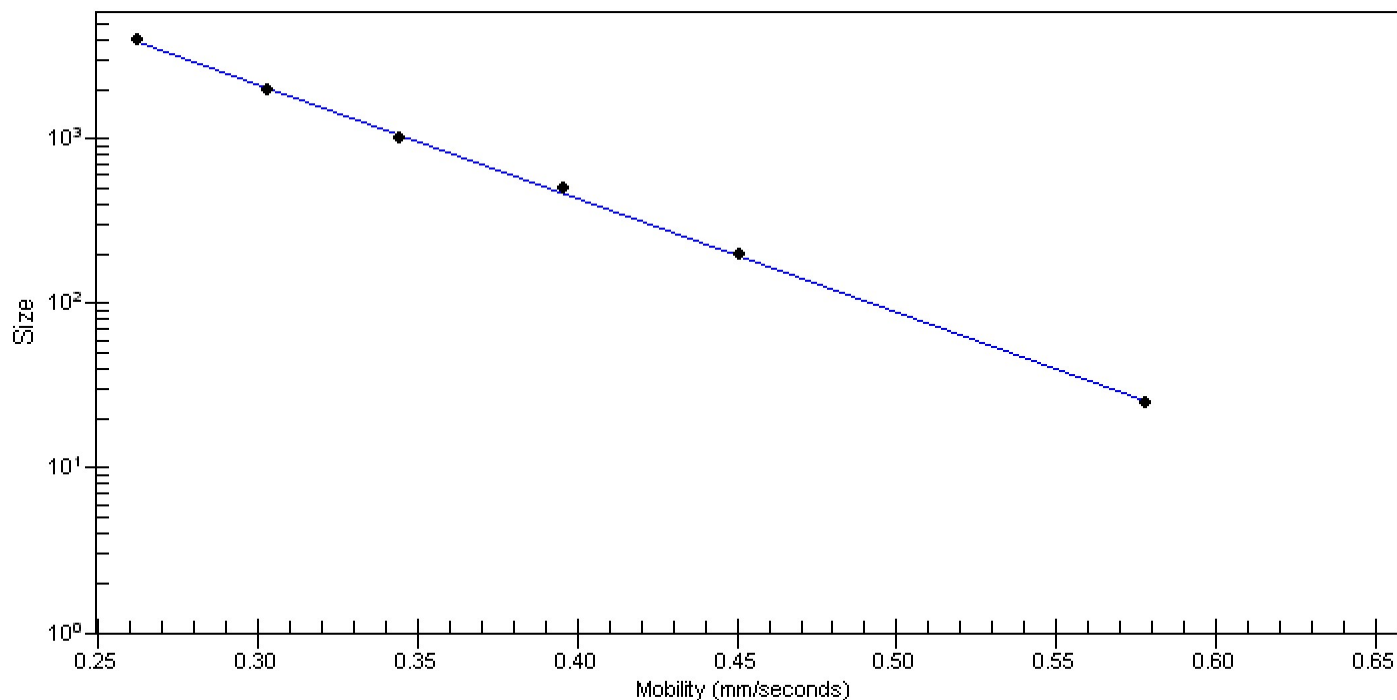


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
Modified: 7/31/2014 4:11:07 PM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31\_003.xad

Created: 7/31/2014 3:36:39 PM  
 Modified: 7/31/2014 4:11:07 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		7/31/2014 4:00:29 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-07-31\2014-07-31_003.xad)		Instrument	Run		7/31/2014 3:36:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		7/31/2014 3:36:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		7/31/2014 3:36:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		7/31/2014 3:36:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		7/31/2014 3:36:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		7/31/2014 3:36:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		7/31/2014 3:36:45 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1