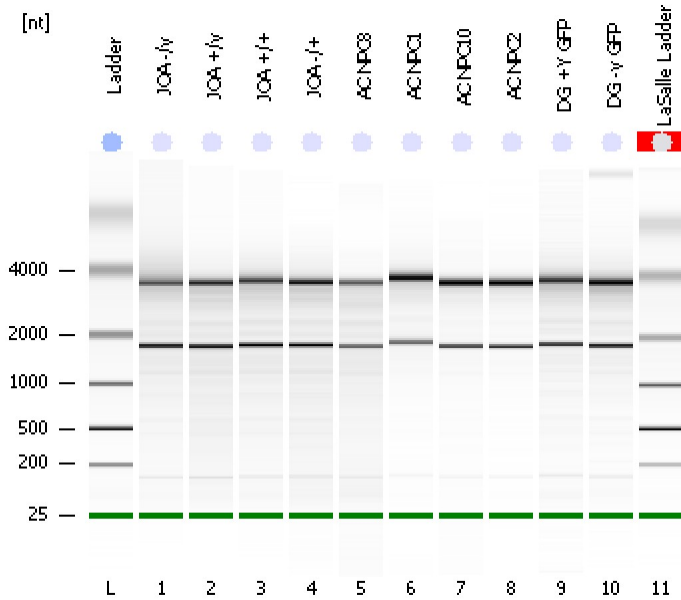


Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

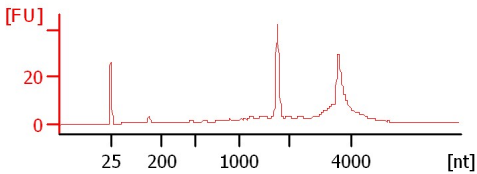
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA Pico Series II.xsy  
 Assay Class: Eukaryote Total RNA Pico  
 Version: 2.6  
 Assay Comments: Total RNA Analysis pg sensitivity (Eukaryote)  
 © Copyright 2003 - 2009 Agilent Technologies, Inc.

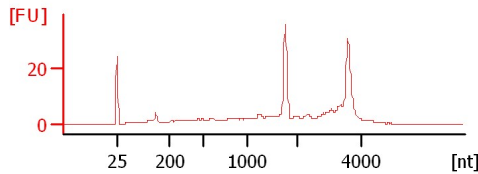
Chip Information:

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

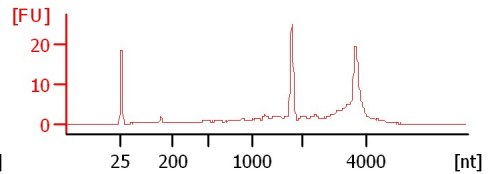
**JOA -/y**  
 RIN: 8.50



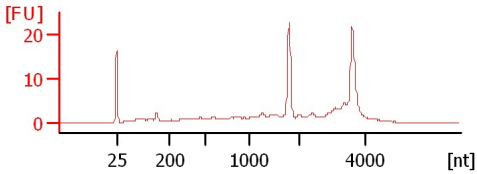
**JOA +/y**  
 RIN: 7.50



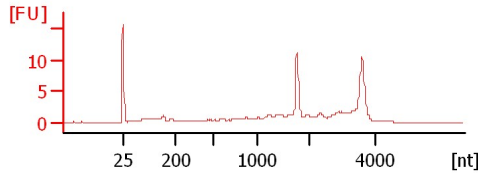
**JOA +/+**  
 RIN: 7.90



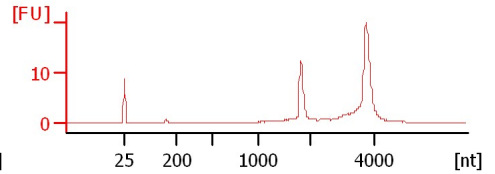
**JOA -/+**  
 RIN: 7.40



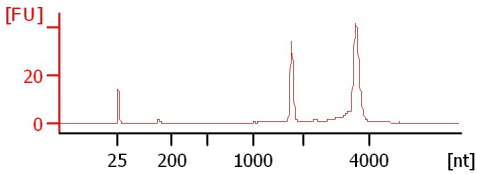
**AC NPC8**  
 RIN: 7.60



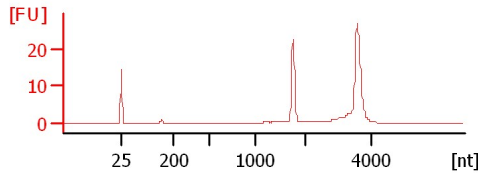
**AC NPC1**  
 RIN: 9.50



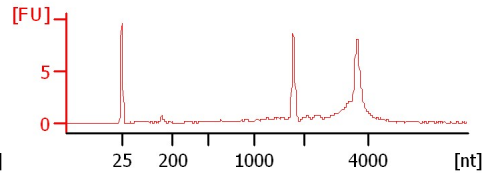
**AC NPC10**  
 RIN: 9.80



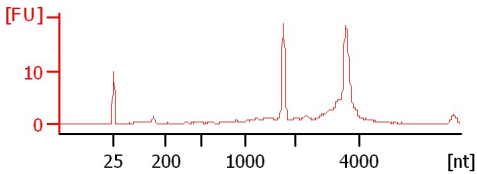
**AC NPC2**  
 RIN: 9.80



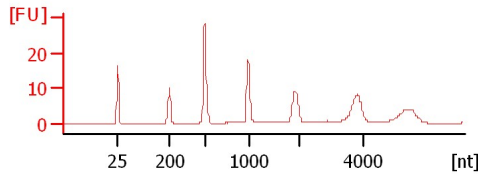
**DG +Y GFP**  
 RIN: 9



**DG -y GFP**  
 RIN: 9.10



**LaSalle Ladder**  
 RIN N/A



Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
JOA -/y		✓	RIN: 8.50	
JOA +/y		✓	RIN: 7.50	
JOA +/+		✓	RIN: 7.90	
JOA -/+		✓	RIN: 7.40	
AC NPC8		✓	RIN: 7.60	
AC NPC1		✓	RIN: 9.50	
AC NPC10		✓	RIN: 9.80	
AC NPC2		✓	RIN: 9.80	
DG +Y GFP		✓	RIN:9	
DG -y GFP		✓	RIN: 9.10	
LaSalle Ladder		✓	RIN N/A	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

## Electrophoresis Assay Details

### General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12  
Minimum Visible Range [s] : 17  
Maximum Visible Range [s] : 70  
Start Analysis Time Range [s] : 18  
End Analysis Time Range [s] : 69  
Ladder Concentration [pg/ $\mu$ l] : 1000  
Lower Marker Concentration [pg/ $\mu$ l] : 0  
Upper Marker Concentration [pg/ $\mu$ l] : 0  
Used Lower Marker for Quantitation  
Standard Curve Fit is Logarithmic  
Show Data Aligned to Lower Marker

### Integrator Settings

Integration Start Time [s] : 18  
Integration End Time [s] : 69  
Slope Threshold : 0.6  
Height Threshold [FU] : 0.5  
Area Threshold : 0.2  
Width Threshold [s] : 0.3  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

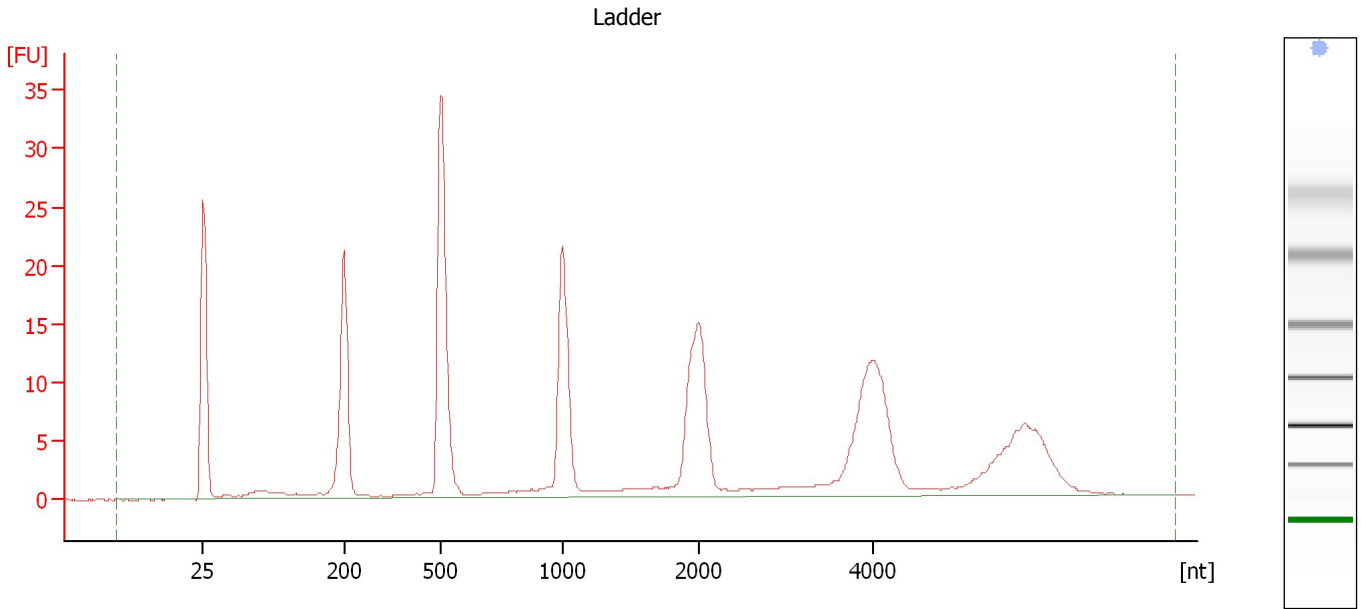
### Ladder

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

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary**



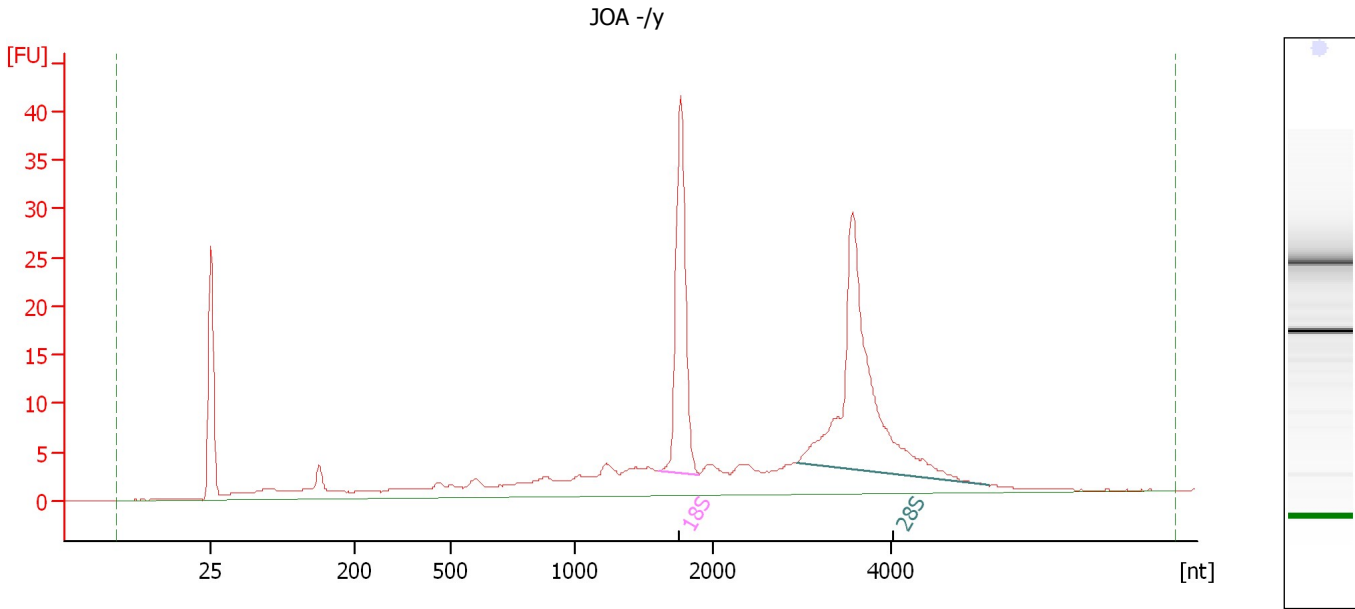
**Overall Results for Ladder**

RNA Area:	234.9	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	1,000 pg/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : JOA -/y**

RNA Area:	261.7	RNA Integrity Number (RIN):	8.5 (B.02.08)
RNA Concentration:	1,114 pg/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: 8.50

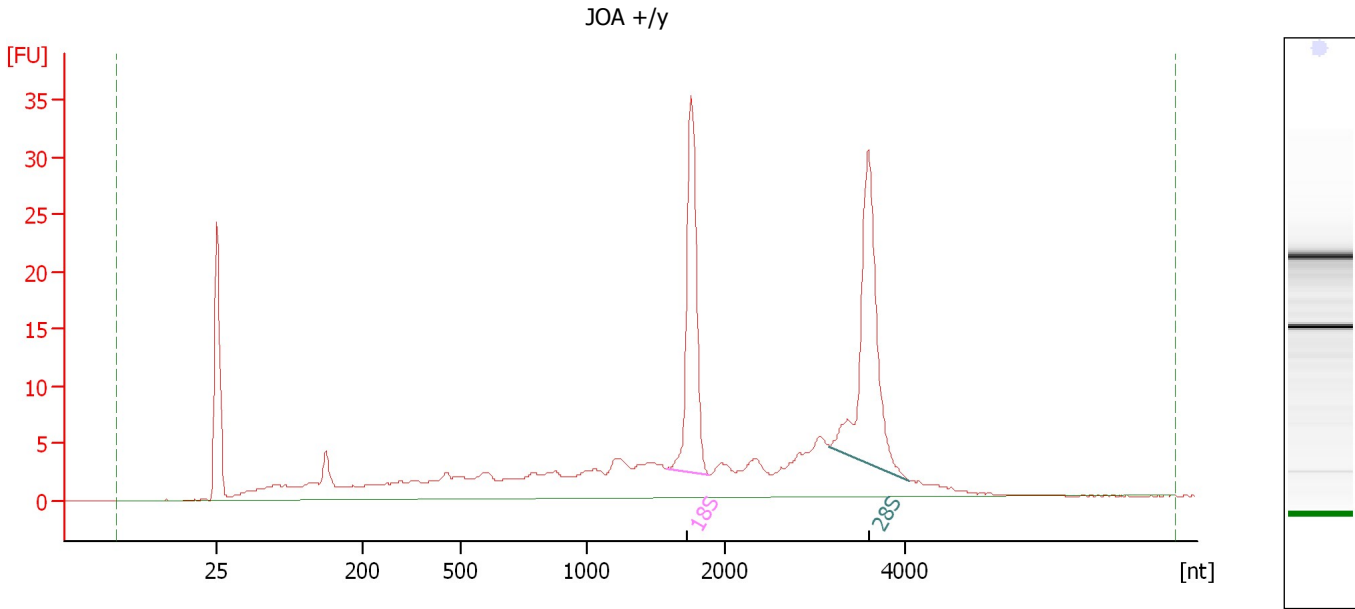
**Fragment table for sample 1 : JOA -/y**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,605	1,900	43.3	16.6
28S	2,938	5,101	71.7	27.4

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : JOA +/y**

RNA Area:	245.8	RNA Integrity Number (RIN):	7.5 (B.02.08)
RNA Concentration:	1,046 pg/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: 7.50

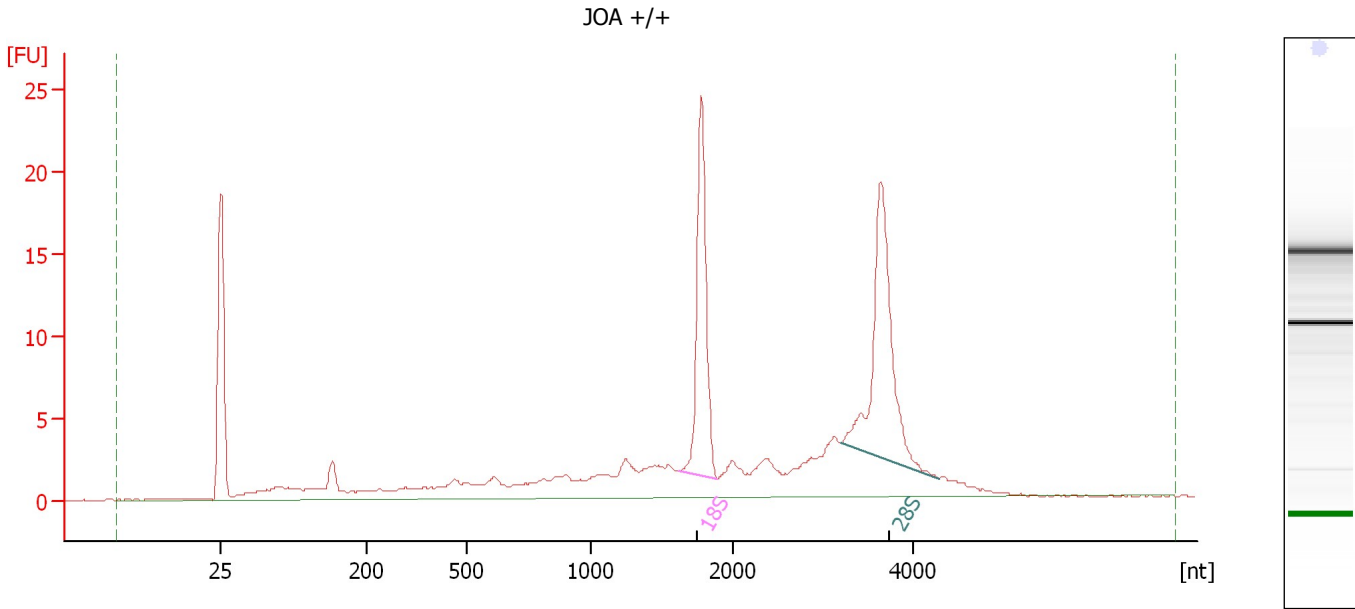
**Fragment table for sample 2 : JOA +/y**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,572	1,879	36.3	14.8
28S	3,153	4,031	42.9	17.5

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : JOA +/+**

RNA Area:	161.7	RNA Integrity Number (RIN):	7.9 (B.02.08)
RNA Concentration:	688 µg/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: 7.90

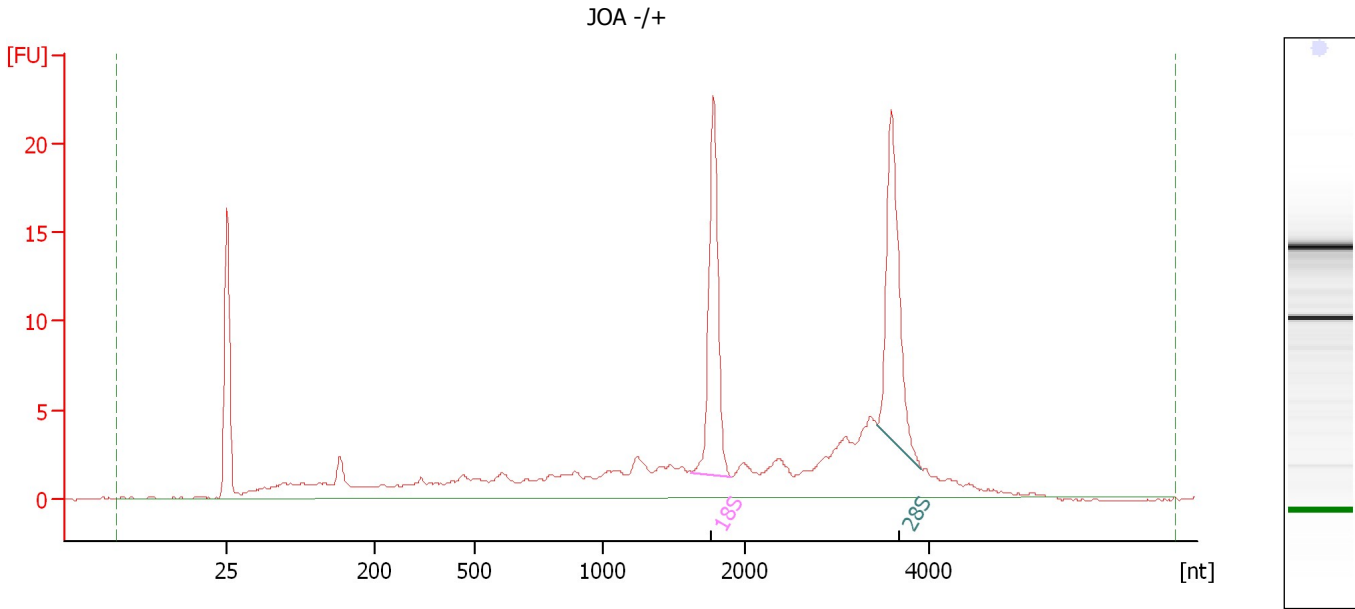
**Fragment table for sample 3 : JOA +/+**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,621	1,895	25.3	15.7
28S	3,206	4,279	29.7	18.3

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : JOA -/+**

RNA Area:	156.7	RNA Integrity Number (RIN):	7.4 (B.02.08)
RNA Concentration:	667 µg/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]:	1.0	Result Flagging Label:	RIN: 7.40

**Fragment table for sample 4 : JOA -/+**

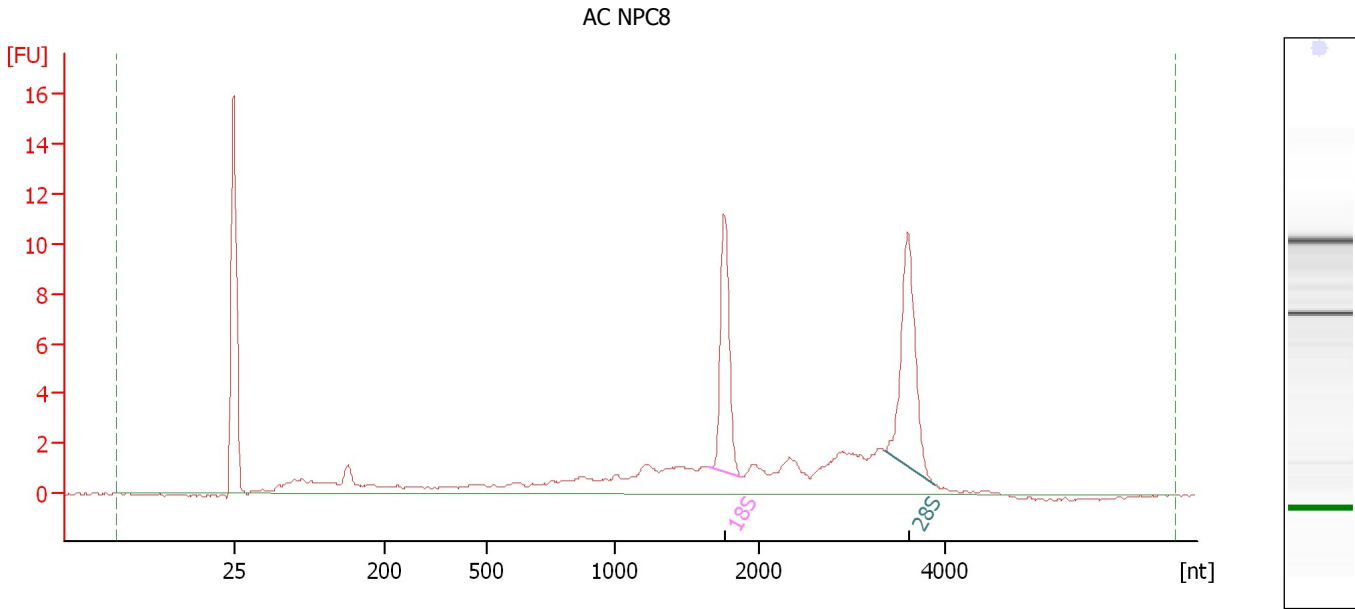
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,626	1,905	22.4	14.3
28S	3,449	3,926	22.6	14.4



Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : AC NPC8**

RNA Area: 74.7                      RNA Integrity Number (RIN): 7.6 (B.02.08)  
RNA Concentration: 318 µg/µl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.3                      Result Flagging Label: RIN: 7.60

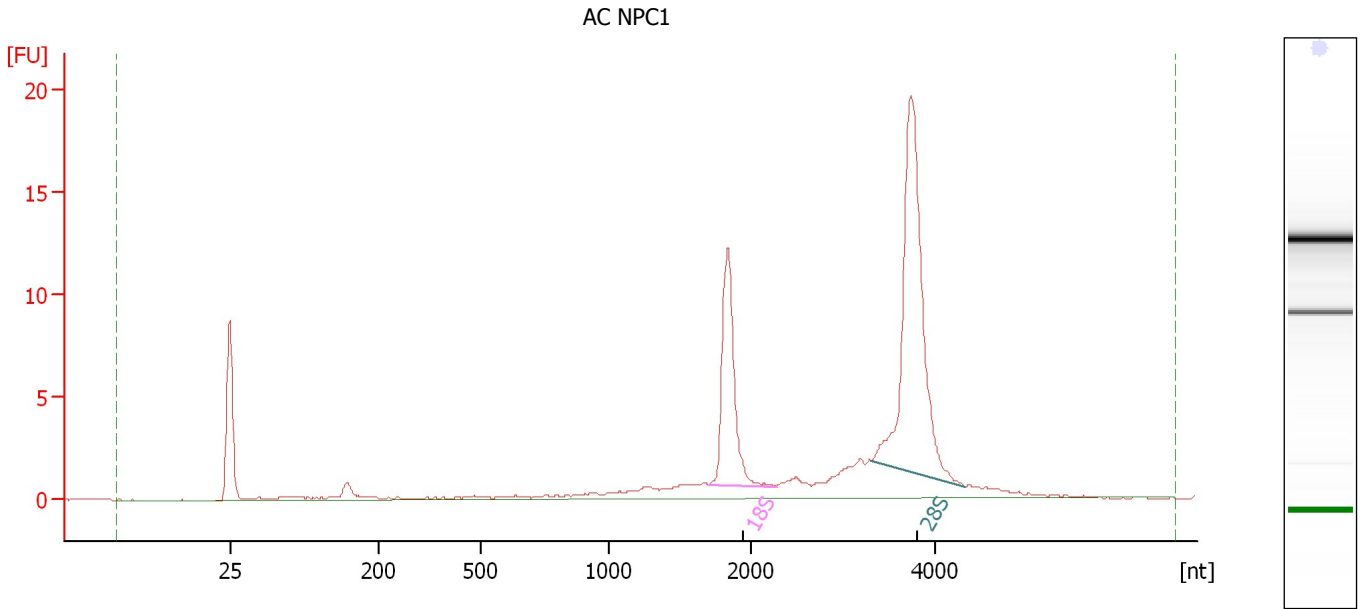
**Fragment table for sample 5 : AC NPC8**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,647	1,870	10.0	13.4
28S	3,349	3,878	12.6	16.8

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : AC NPC1**

RNA Area: 89.5                      RNA Integrity Number (RIN): 9.5 (B.02.08)  
RNA Concentration: 381 pg/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.2              Result Flagging Label: RIN: 9.50

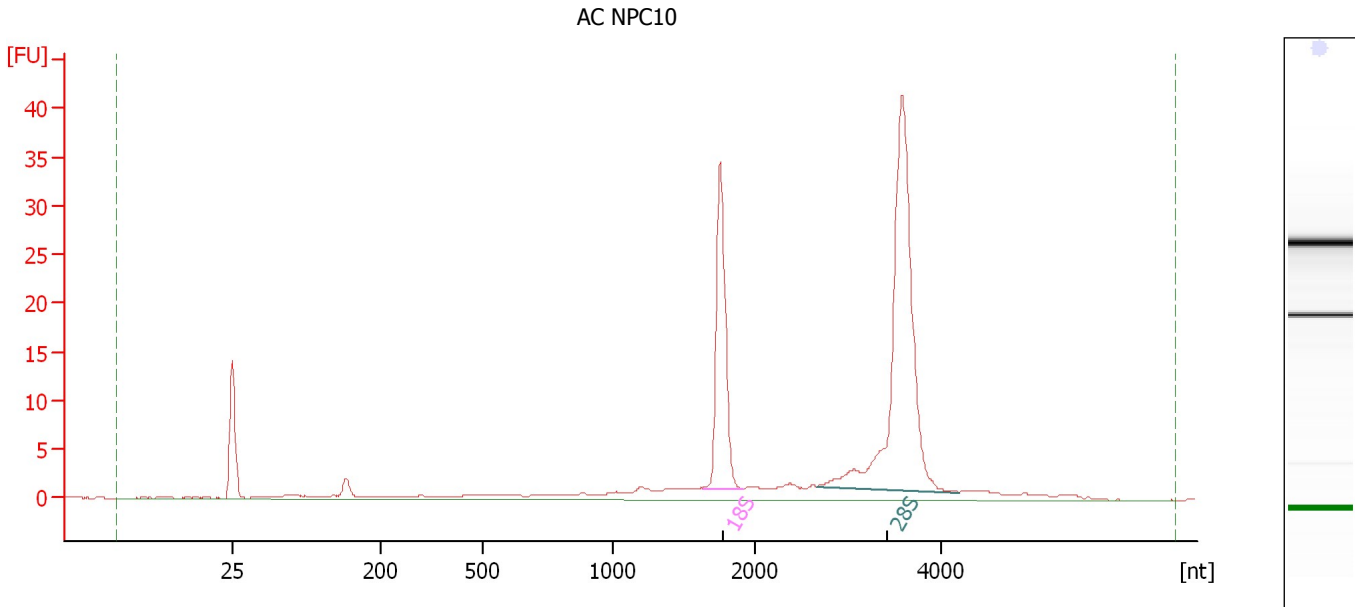
**Fragment table for sample 6 : AC NPC1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,704	2,271	15.3	17.1
28S	3,290	4,309	33.6	37.6

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : AC NPC10**

RNA Area:	167.9	RNA Integrity Number (RIN):	9.8 (B.02.08)
RNA Concentration:	715 µg/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]:	2.2	Result Flagging Label:	RIN: 9.80

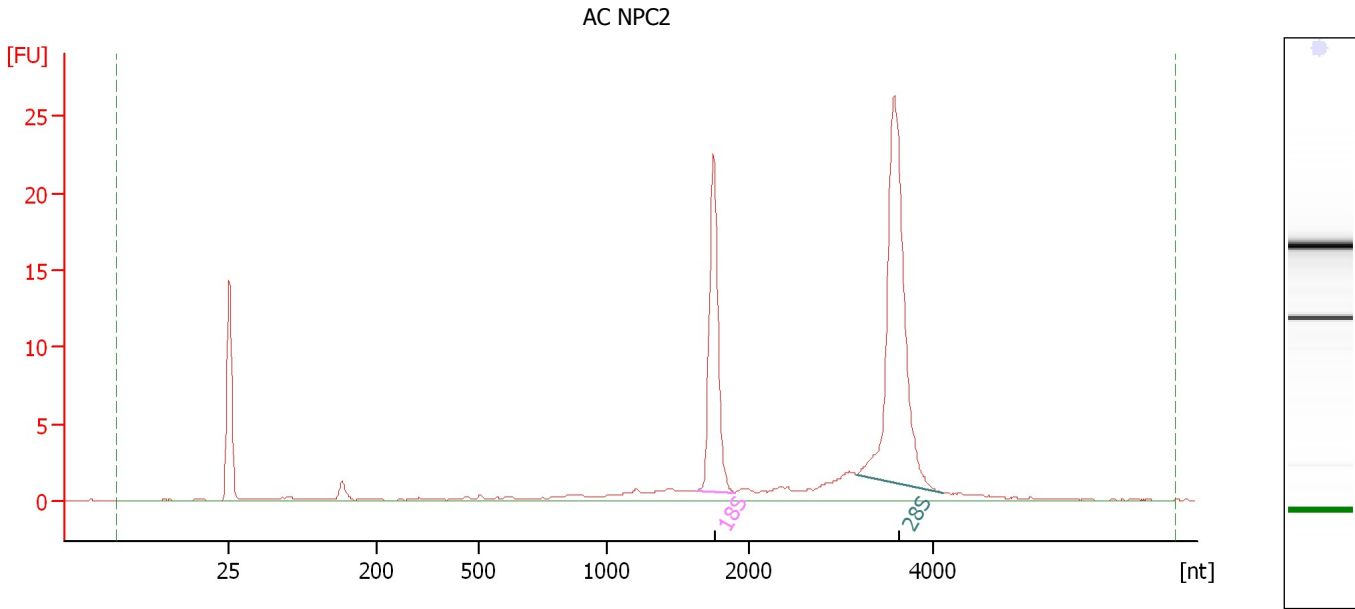
**Fragment table for sample 7 : AC NPC10**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,631	1,914	34.4	20.5
28S	2,674	4,196	75.3	44.8

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : AC NPC2**

RNA Area: 97.3                      RNA Integrity Number (RIN): 9.8 (B.02.08)  
RNA Concentration: 414 µg/µl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.9                      Result Flagging Label: RIN: 9.80

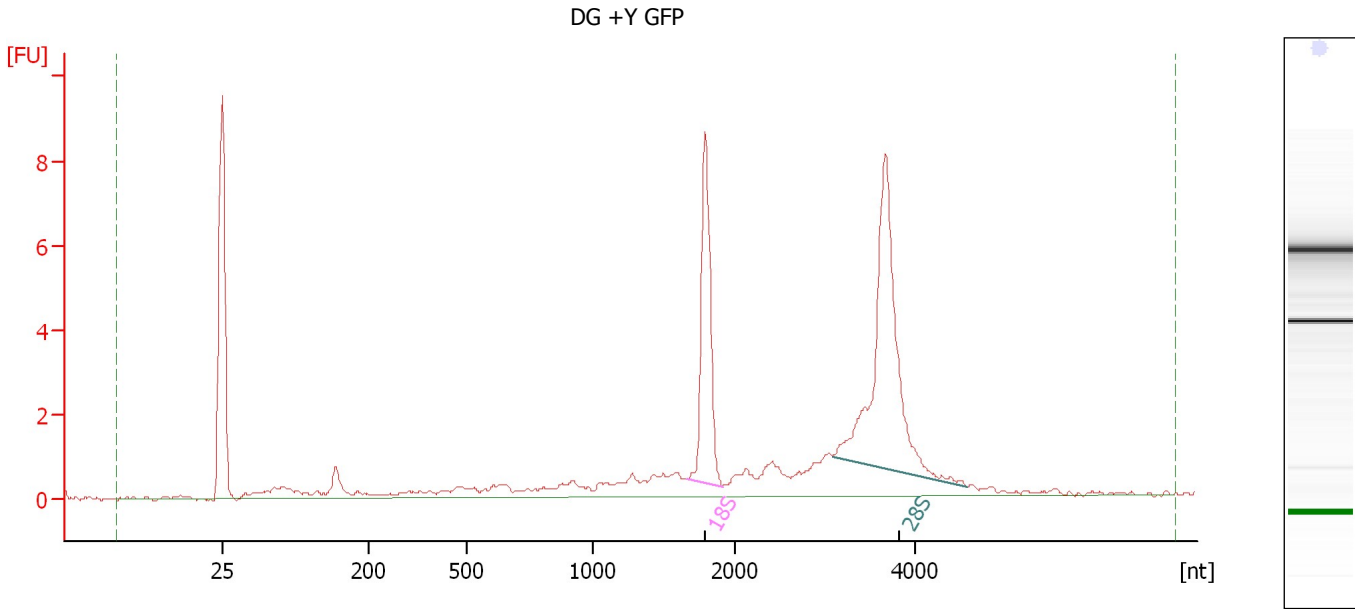
**Fragment table for sample 8 : AC NPC2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,628	1,898	22.1	22.7
28S	3,165	4,105	41.3	42.4

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : DG +Y GFP**

RNA Area:	52.4	RNA Integrity Number (RIN):	9 (B.02.08)
RNA Concentration:	223 µg/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

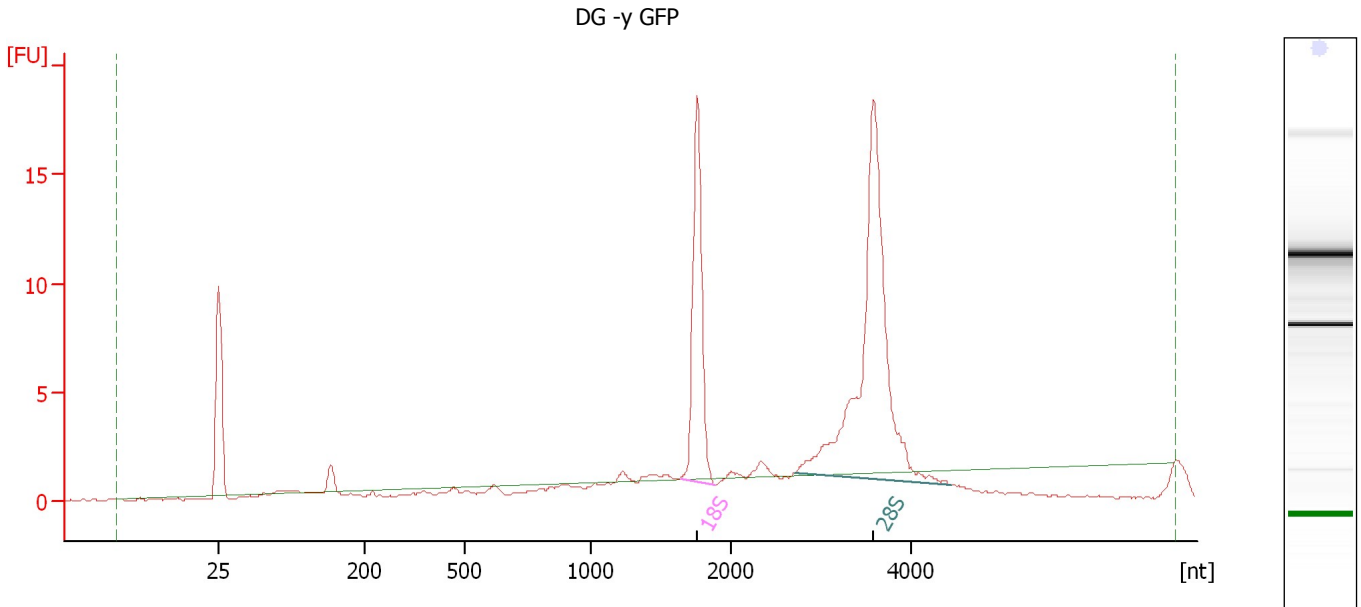
**Fragment table for sample 9 : DG +Y GFP**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,667	1,918	8.5	16.3
28S	3,086	4,557	15.5	29.6

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : DG -y GFP**

RNA Area:	61.0	RNA Integrity Number (RIN):	9.1 (B.02.08)
RNA Concentration:	260 µg/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]:	2.2	Result Flagging Label:	RIN: 9.10

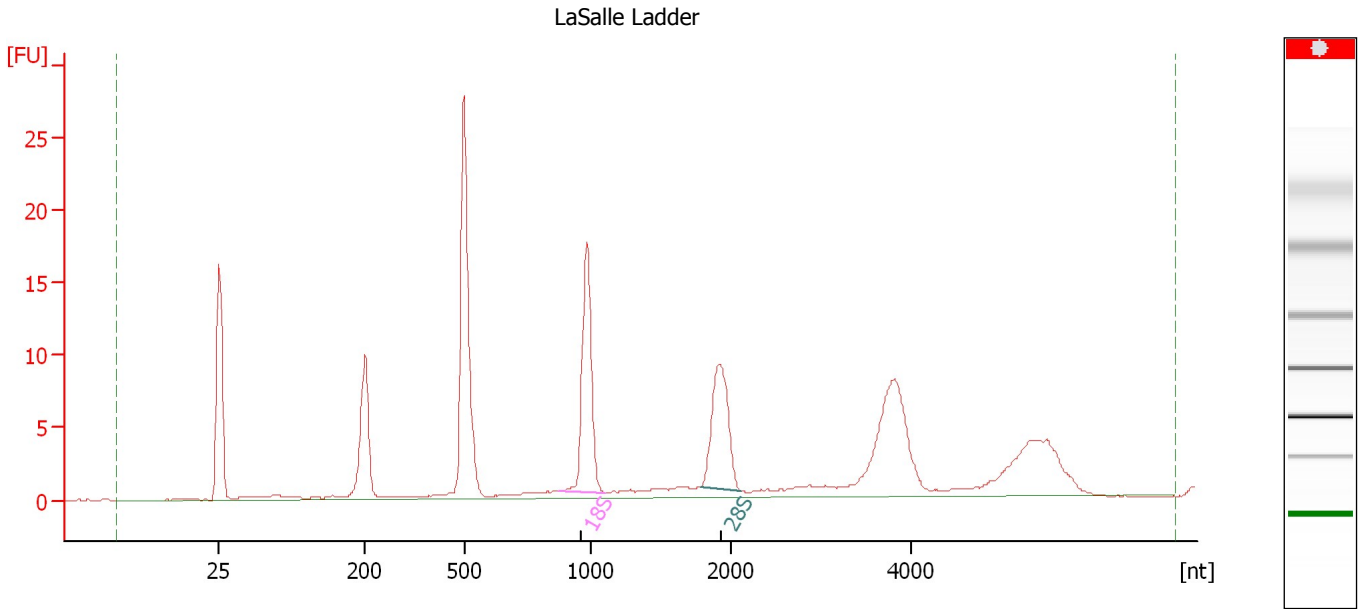
**Fragment table for sample 10 : DG -y GFP**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,643	1,887	18.4	30.2
28S	2,723	4,437	41.3	67.6

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : LaSalle Ladder**

RNA Area:	153.4	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	653 µg/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

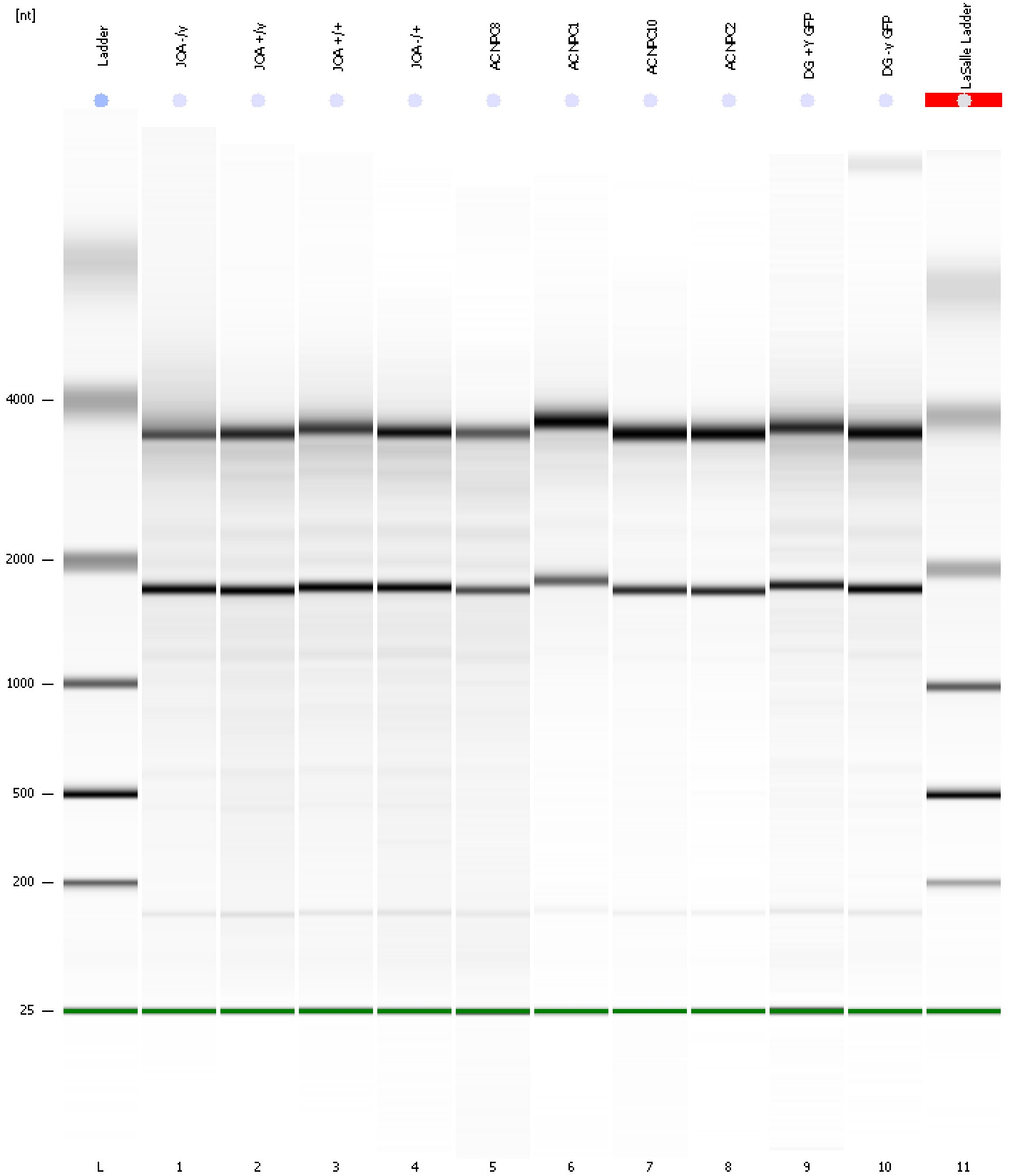
**Fragment table for sample 11 : LaSalle Ladder**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	873	1,109	20.6	13.4
28S	1,788	2,121	16.2	10.6

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
Modified: 4/23/2015 12:30:00 PM

**Gel Image**





Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-23\2015-04-23\_004.xad

Created: 4/23/2015 12:07:00 PM  
 Modified: 4/23/2015 12:30:00 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		4/23/2015 12:29:53 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-23\2015-04-23_004.xad)		Instrument	Run		4/23/2015 12:07:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/23/2015 12:07:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/23/2015 12:07:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/23/2015 12:07:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/23/2015 12:07:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/23/2015 12:07:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/23/2015 12:07:05 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1