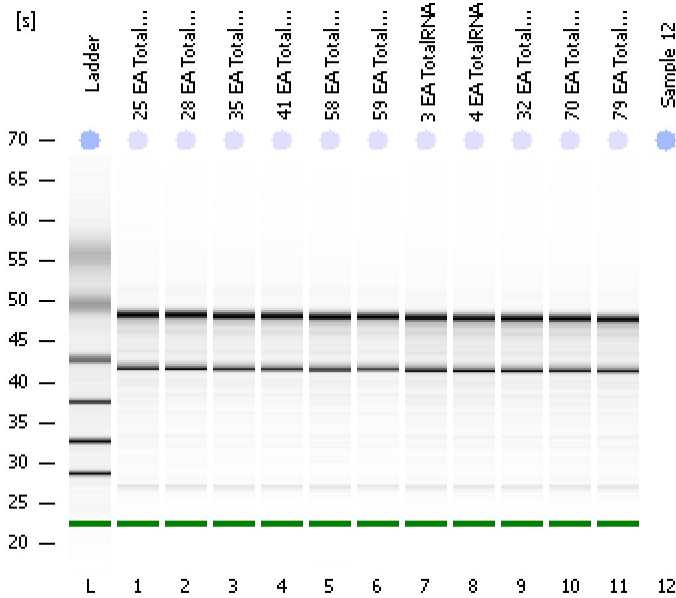


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

Electrophoresis File Run Summary



Instrument Information:

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

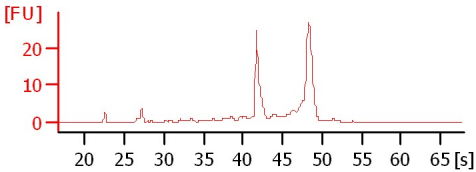
Assay Information:

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.

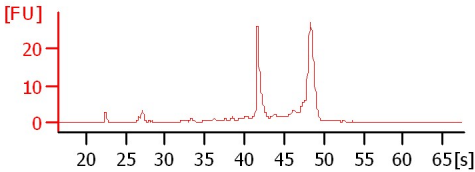
Chip Information:

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

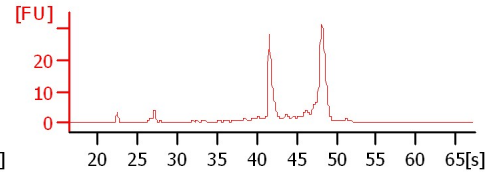
25 EA TotalRNA  
RIN: 8.70



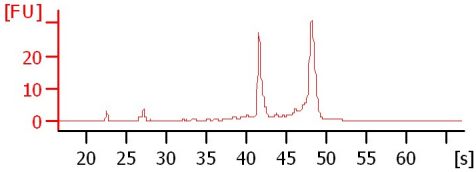
28 EA TotalRNA  
RIN:9



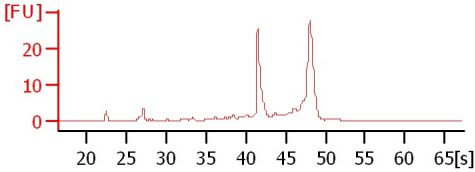
35 EA TotalRNA  
RIN: 9.10



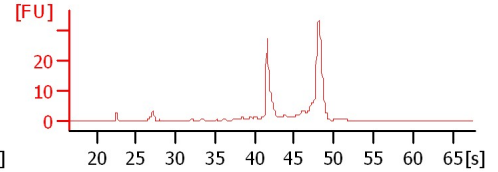
41 EA TotalRNA  
RIN: 9.30



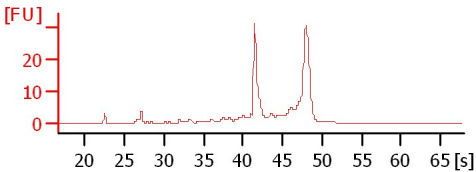
58 EA TotalRNA  
RIN:9



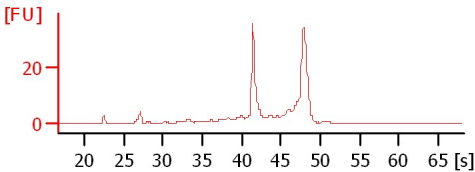
59 EA TotalRNA  
RIN: 9.30



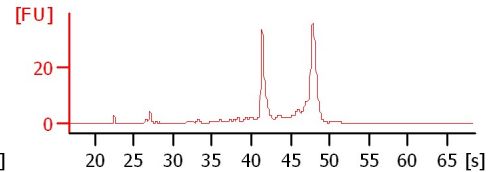
3 EA TotalRNA  
RIN: 8.60



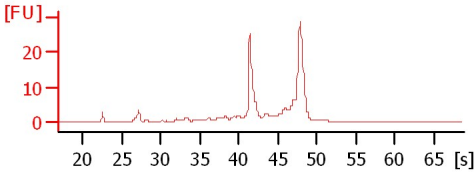
4 EA TotalRNA  
RIN: 8.50



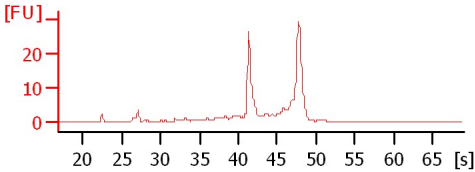
32 EA TotalRNA  
RIN: 8.80



70 EA TotalRNA  
RIN: 8.70



79 EA TotalRNA  
RIN: 8.50



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
 Modified: 4/4/2013 10:43:33 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
25 EA TotalRNA		✓	RIN: 8.70	
28 EA TotalRNA		✓	RIN:9	
35 EA TotalRNA		✓	RIN: 9.10	
41 EA TotalRNA		✓	RIN: 9.30	
58 EA TotalRNA		✓	RIN:9	
59 EA TotalRNA		✓	RIN: 9.30	
3 EA TotalRNA		✓	RIN: 8.60	
4 EA TotalRNA		✓	RIN: 8.50	
32 EA TotalRNA		✓	RIN: 8.80	
70 EA TotalRNA		✓	RIN: 8.70	
79 EA TotalRNA		✓	RIN: 8.50	
Sample 12				
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

## 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

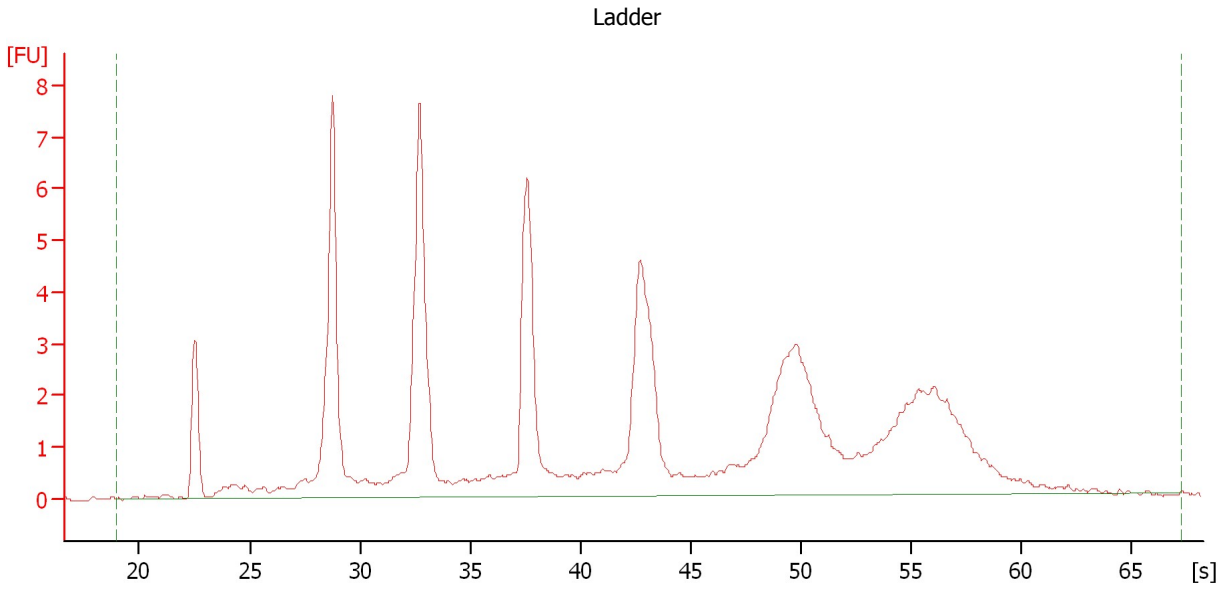
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary**



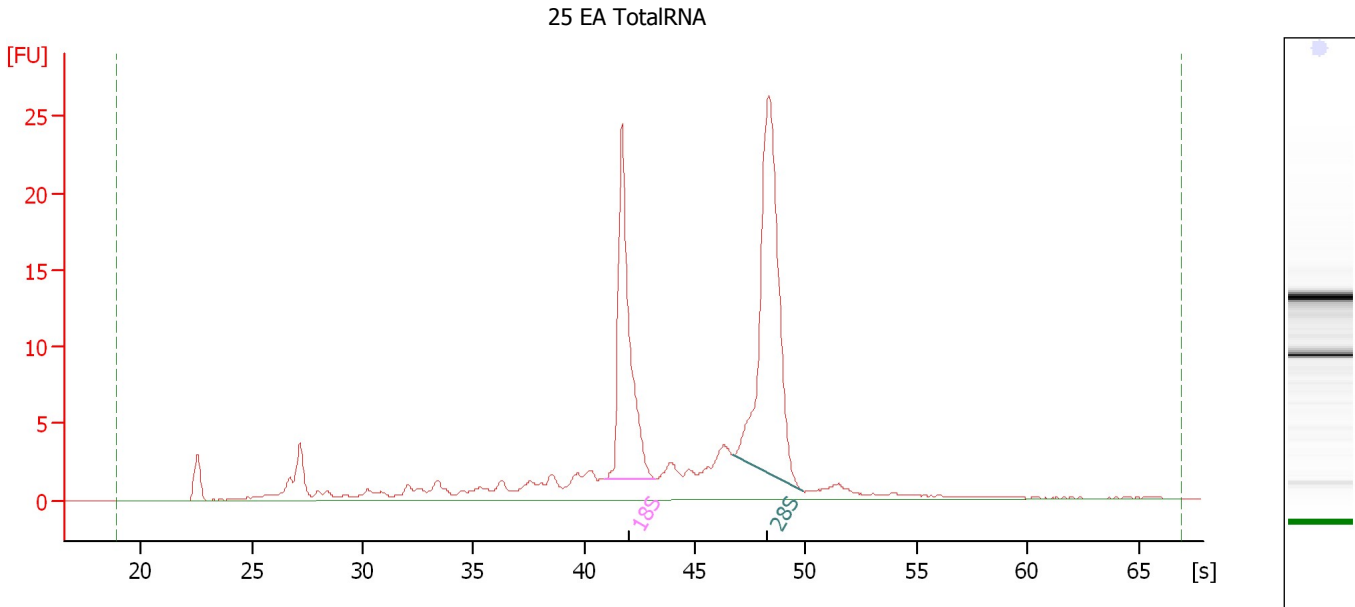
**Overall Results for Ladder**

RNA Area:	97.8	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:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 25 EA TotalRNA**

RNA Area: 160.5 RNA Integrity Number (RIN): 8.7 (B.02.08)  
RNA Concentration: 246 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 8.70

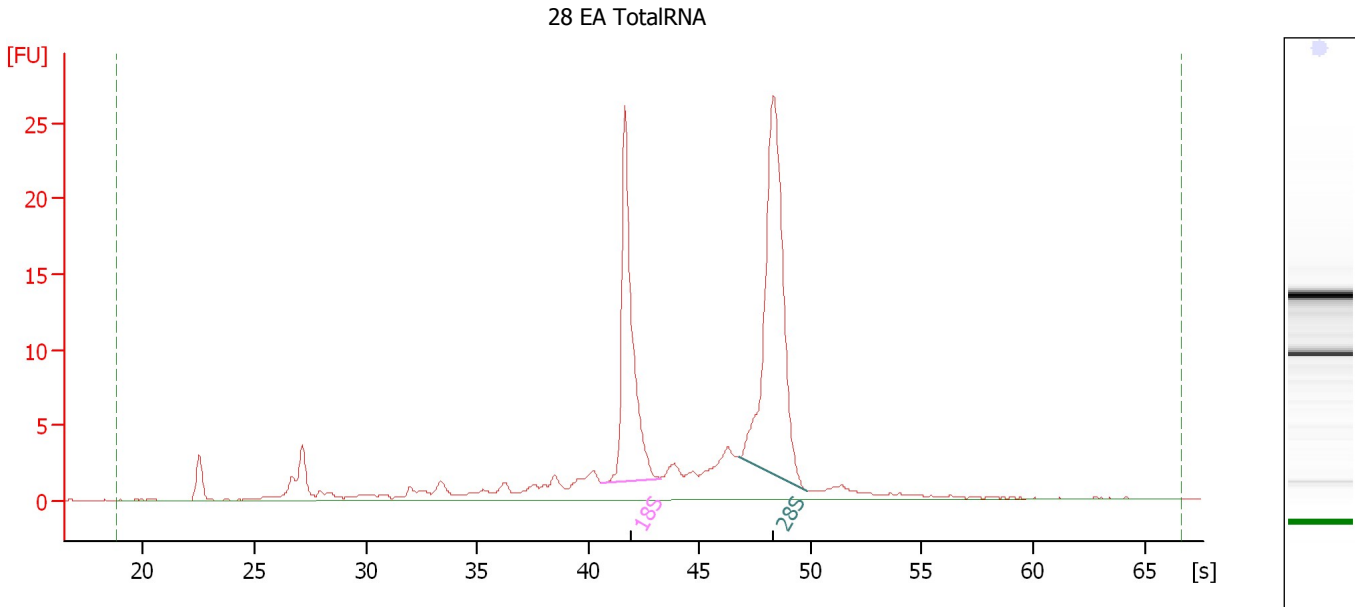
**Fragment table for sample 1 : 25 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.93	43.16	31.2	19.4
28S	46.75	49.85	48.5	30.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 28 EA TotalRNA**

RNA Area: 153.9                      RNA Integrity Number (RIN): 9 (B.02.08)  
RNA Concentration: 236 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5                      Result Flagging Label: RIN:9

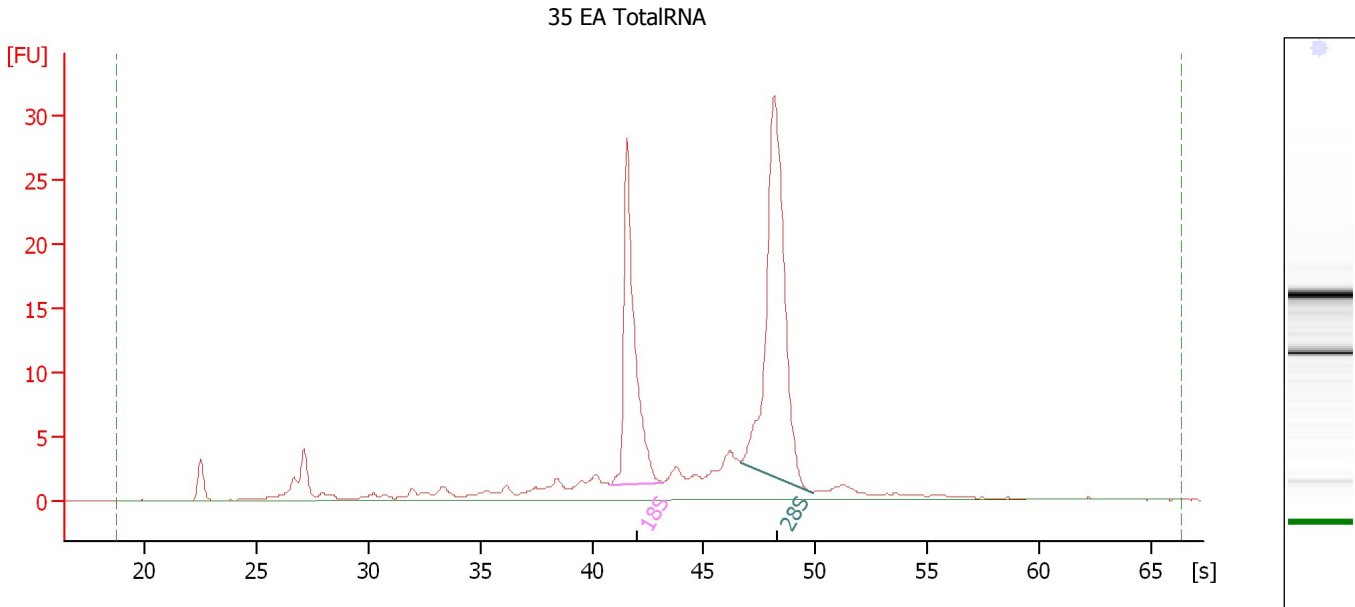
**Fragment table for sample 2 : 28 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.61	43.26	31.7	20.6
28S	46.79	49.88	49.0	31.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 35 EA TotalRNA**

RNA Area: 173.4 RNA Integrity Number (RIN): 9.1 (B.02.08)  
RNA Concentration: 266 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.10

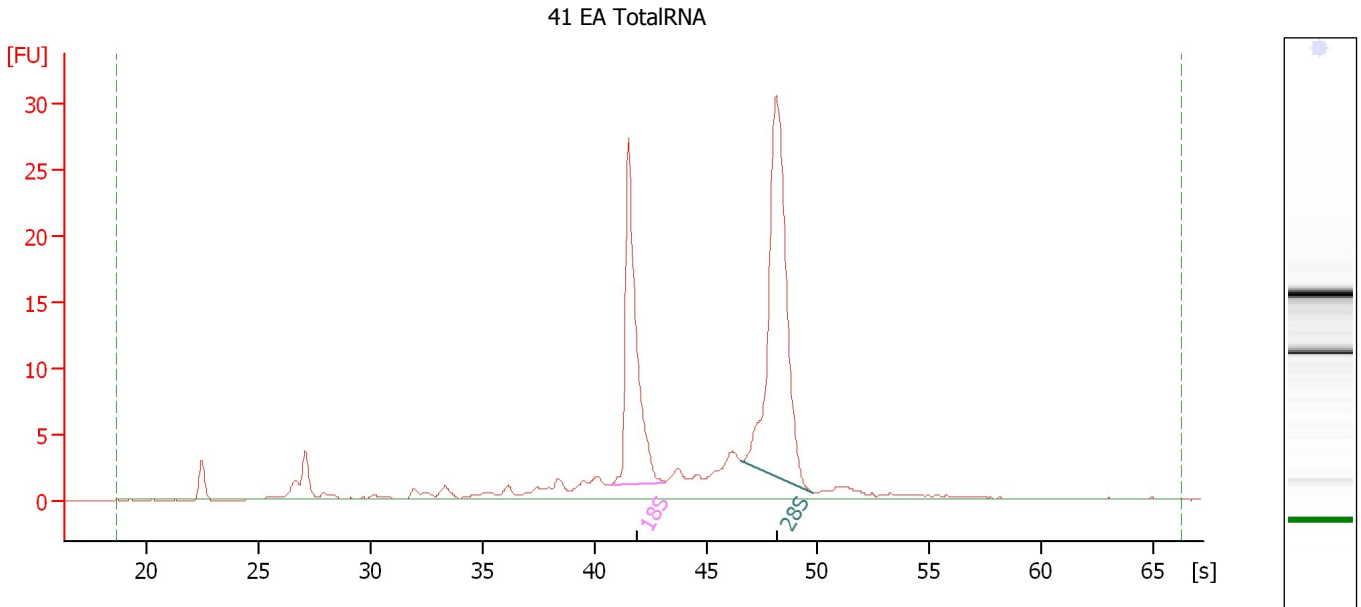
**Fragment table for sample 3 : 35 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.87	43.17	35.3	20.3
28S	46.63	49.86	57.2	33.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 41 EA TotalRNA**

RNA Area: 158.5 RNA Integrity Number (RIN): 9.3 (B.02.08)  
RNA Concentration: 243 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.30

**Fragment table for sample 4 : 41 EA TotalRNA**

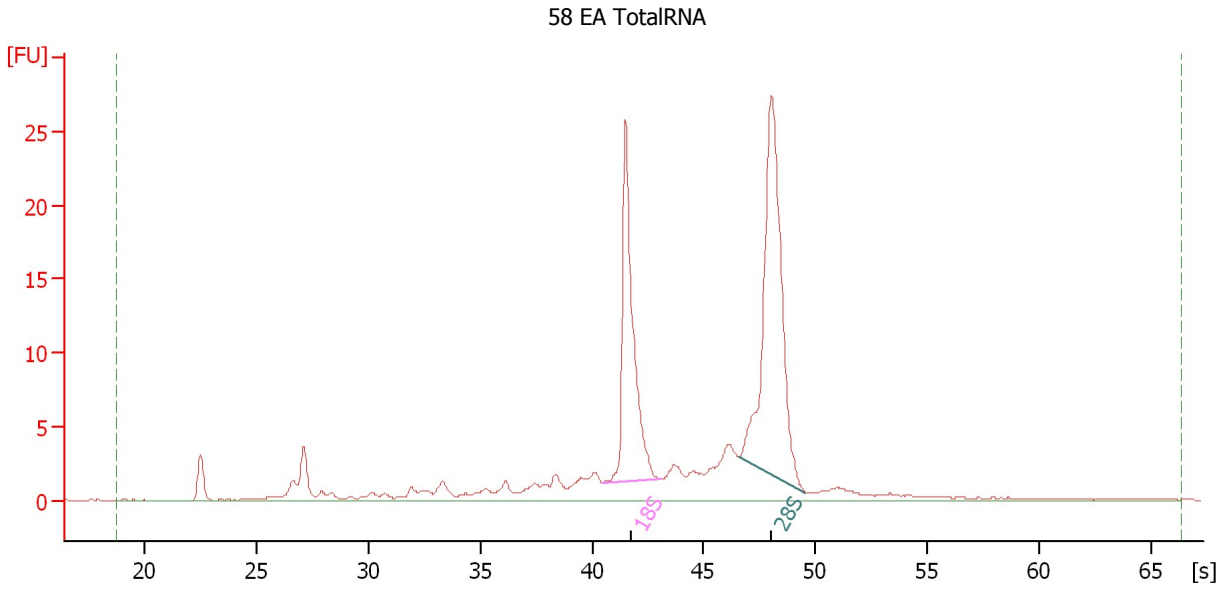
Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.78	43.18	34.2	21.6
28S	46.54	49.75	54.6	34.5



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 58 EA TotalRNA**

RNA Area: 156.7                      RNA Integrity Number (RIN): 9 (B.02.08)  
RNA Concentration: 240 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5              Result Flagging Label: RIN:9

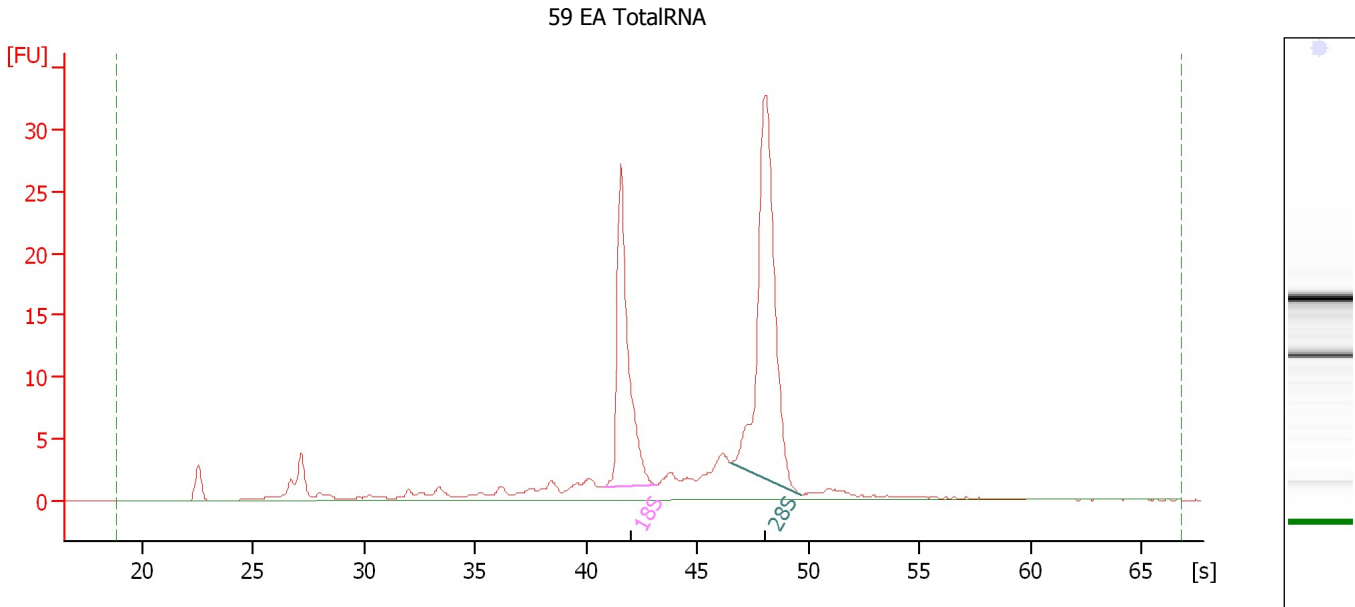
**Fragment table for sample 5 : 58 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.48	43.13	32.1	20.5
28S	46.59	49.57	48.8	31.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 59 EA TotalRNA**

RNA Area: 163.4 RNA Integrity Number (RIN): 9.3 (B.02.08)  
RNA Concentration: 251 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.6 Result Flagging Label: RIN: 9.30

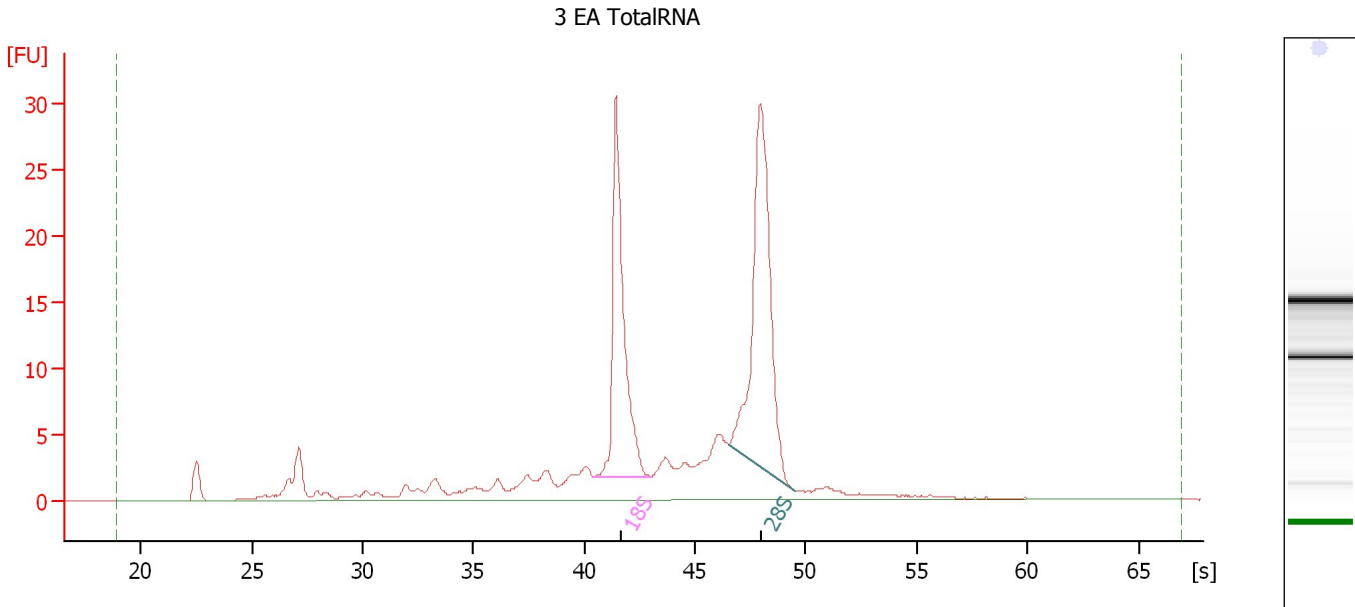
**Fragment table for sample 6 : 59 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.84	43.21	34.5	21.1
28S	46.55	49.65	56.2	34.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 3 EA TotalRNA**

RNA Area: 189.5                      RNA Integrity Number (RIN): 8.6 (B.02.08)  
RNA Concentration: 291 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.4                      Result Flagging Label: RIN: 8.60

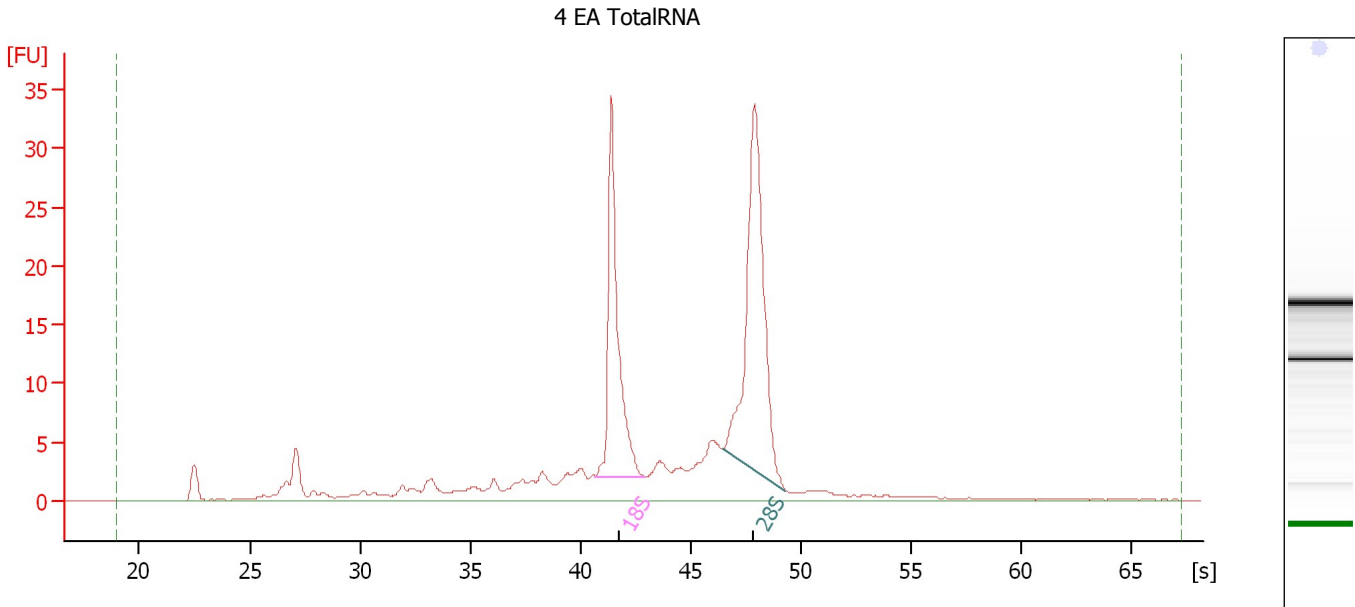
**Fragment table for sample 7 : 3 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.39	43.01	37.9	20.0
28S	46.50	49.51	52.4	27.6

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 4 EA TotalRNA**

RNA Area: 207.6                      RNA Integrity Number (RIN): 8.5 (B.02.08)  
RNA Concentration: 318 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5                      Result Flagging Label: RIN: 8.50

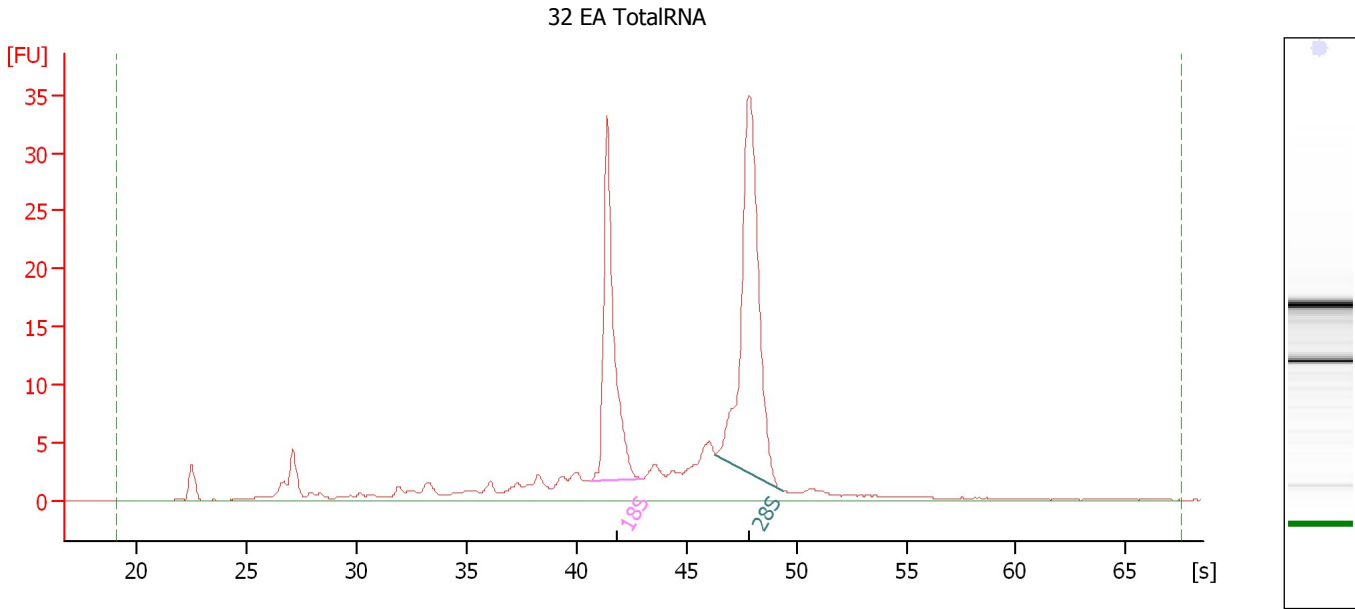
**Fragment table for sample 8 : 4 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.67	42.95	39.4	19.0
28S	46.41	49.29	58.4	28.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 32 EA TotalRNA**

RNA Area: 201.6 RNA Integrity Number (RIN): 8.8 (B.02.08)  
RNA Concentration: 309 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5 Result Flagging Label: RIN: 8.80

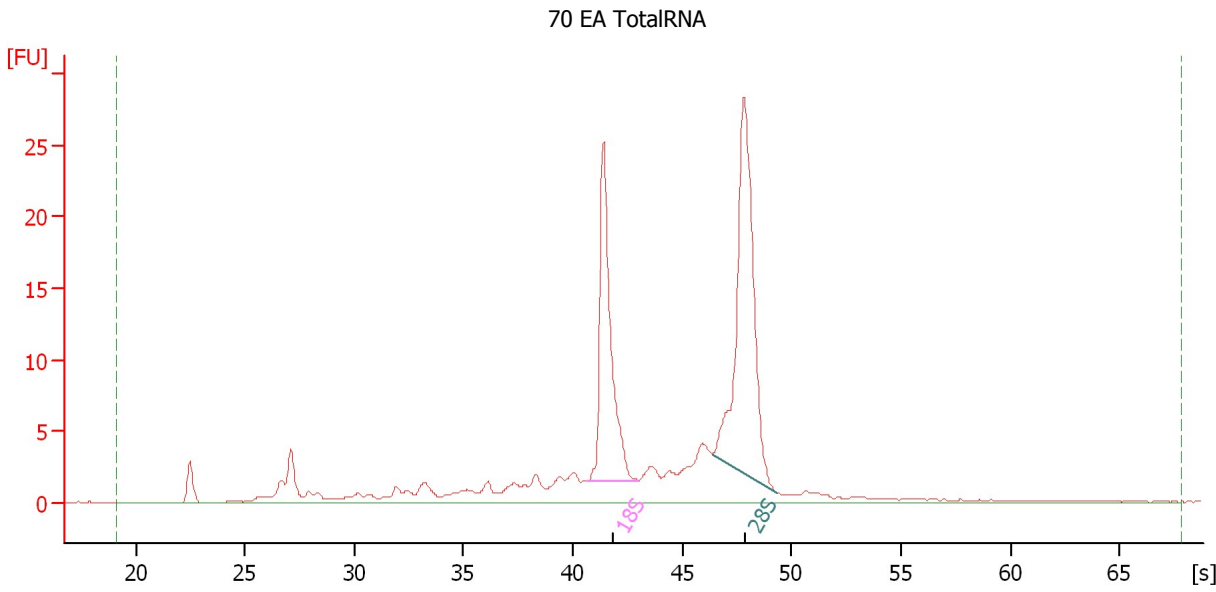
**Fragment table for sample 9 : 32 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.65	42.99	40.2	19.9
28S	46.32	49.40	61.4	30.5

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
 Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 70 EA TotalRNA**

RNA Area:	167.5	RNA Integrity Number (RIN):	8.7 (B.02.08)
RNA Concentration:	257 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: 8.70

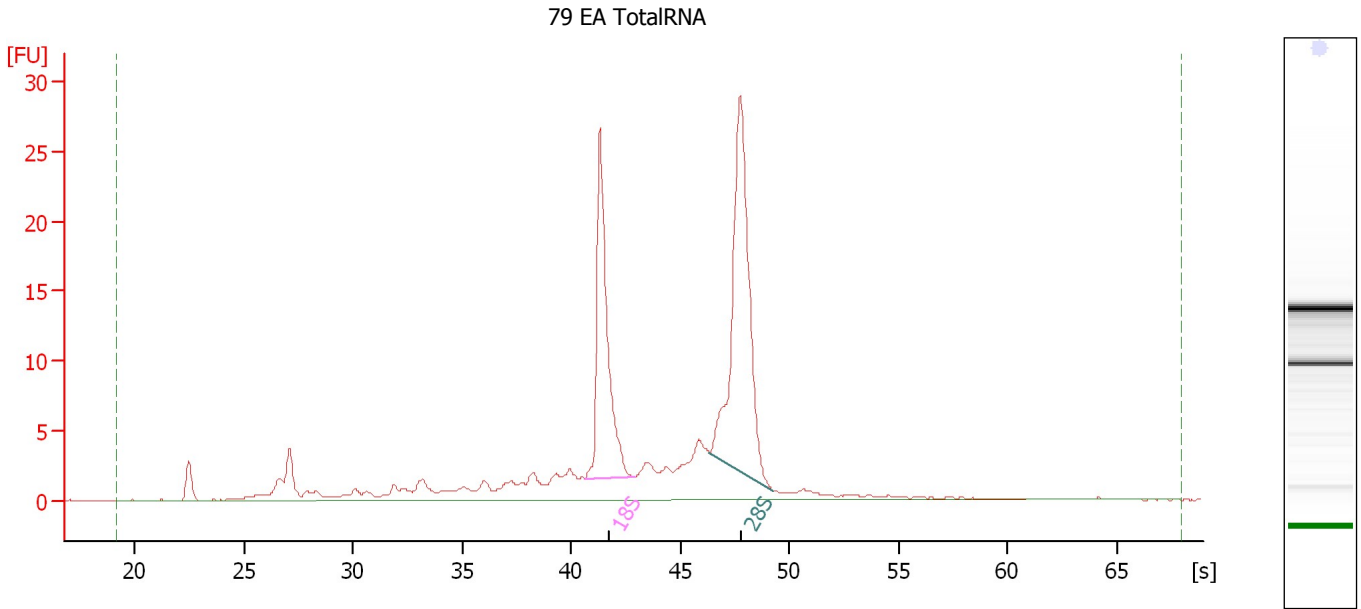
**Fragment table for sample 10 : 70 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.63	42.99	31.9	19.1
28S	46.38	49.32	48.7	29.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 79 EA TotalRNA**

RNA Area: 173.4 RNA Integrity Number (RIN): 8.5 (B.02.08)  
RNA Concentration: 266 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5 Result Flagging Label: RIN: 8.50

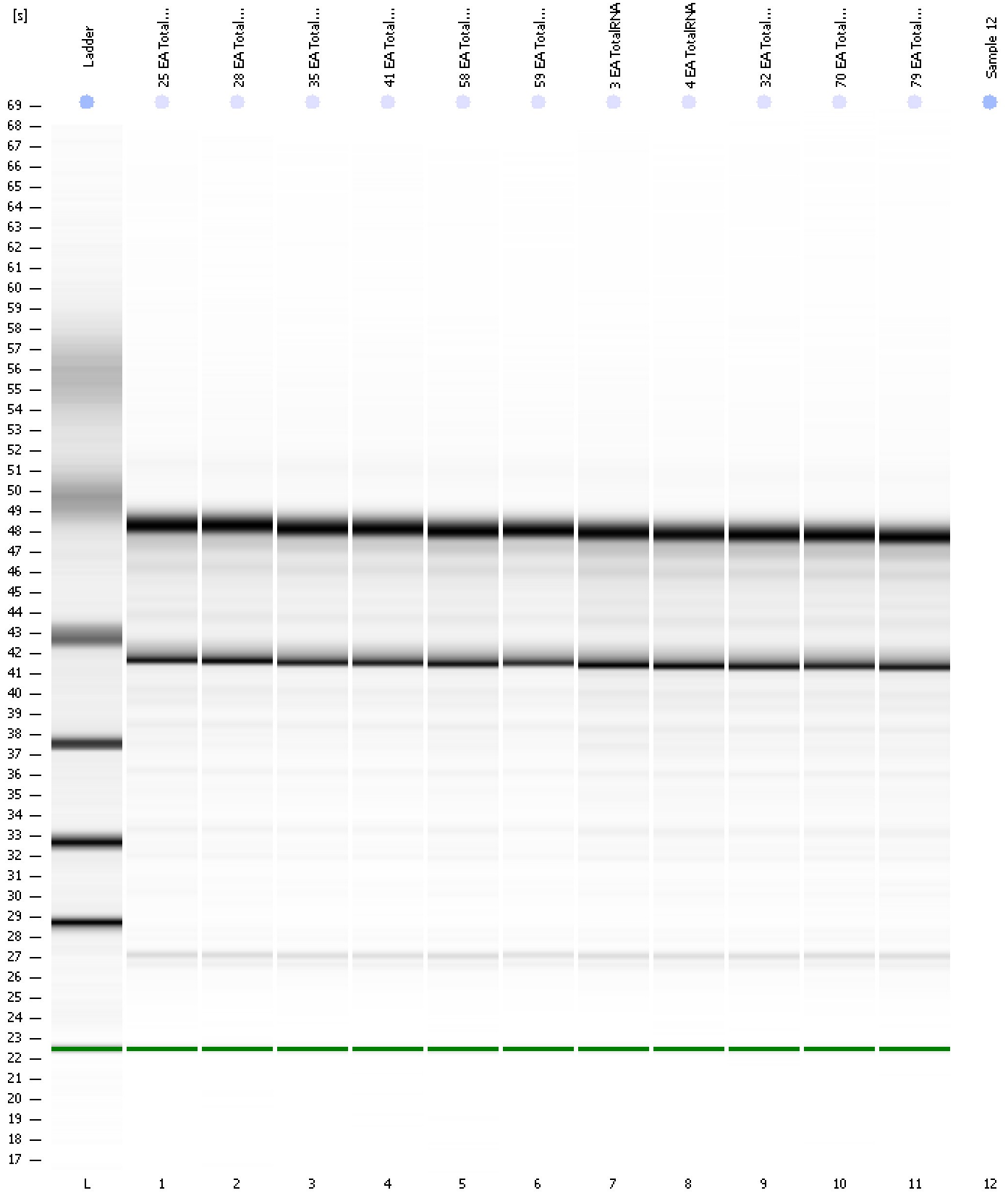
**Fragment table for sample 11 : 79 EA TotalRNA**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	40.67	42.88	32.0	18.5
28S	46.33	49.23	49.3	28.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Gel Image**



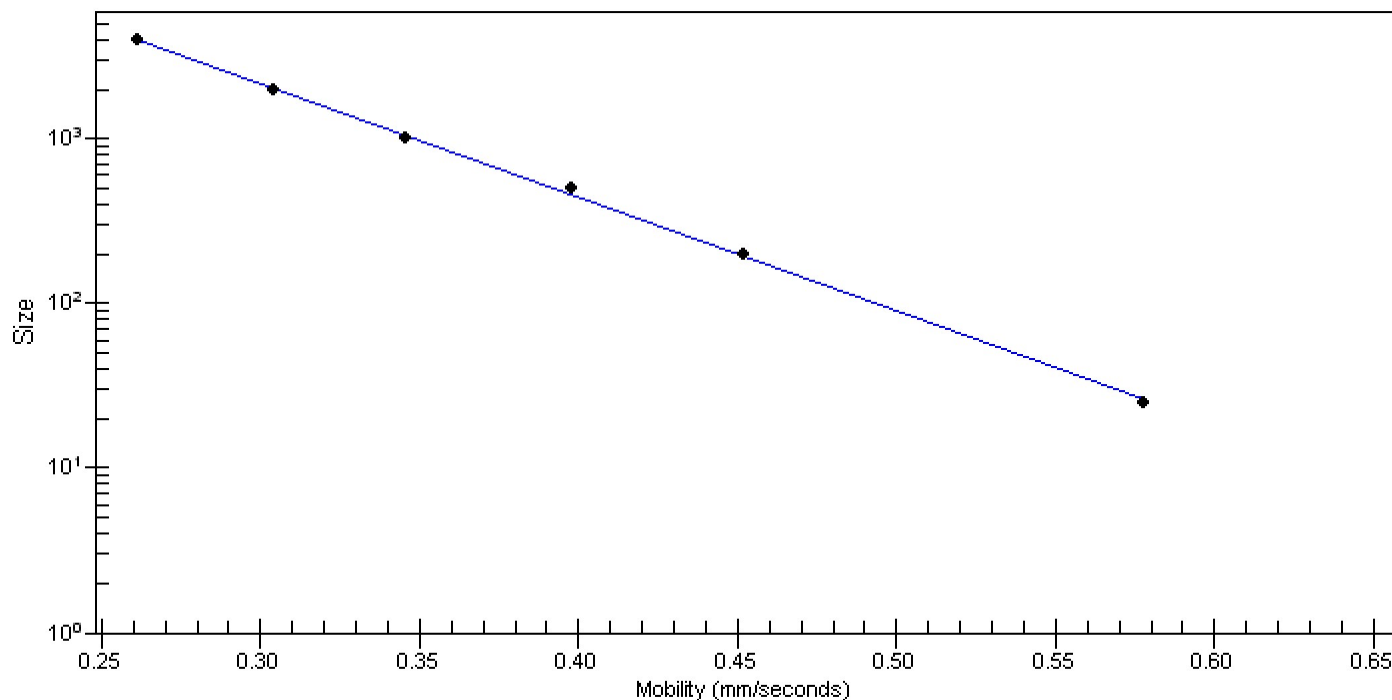


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Curves**

**Standard Curve**



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Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
Modified: 4/4/2013 10:43:33 AM

**Invalid Samples**

Sample 12 has not been run, no results available.

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-04-04\2013-04-04\_001.xad

Created: 4/4/2013 10:21:01 AM  
 Modified: 4/4/2013 10:43:33 AM

**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		4/4/2013 10:43:29 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-04-04\2013-04-04_001.xad)		Instrument	Run		4/4/2013 10:21:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/4/2013 10:21:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/4/2013 10:21:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/4/2013 10:21:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/4/2013 10:21:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/4/2013 10:21:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/4/2013 10:21:07 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1