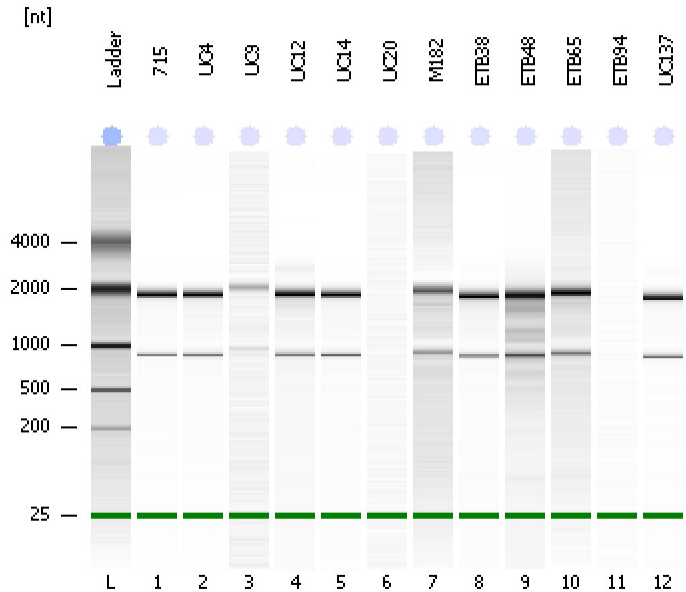


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

Electrophoresis File Run Summary



Instrument Information:

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

Assay Information:

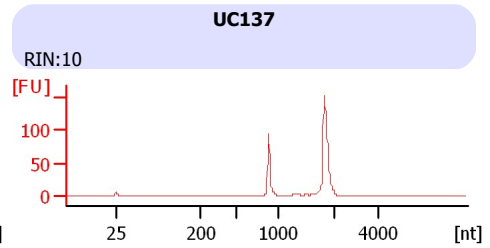
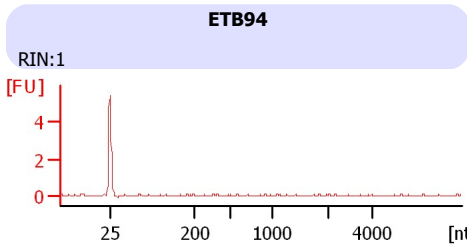
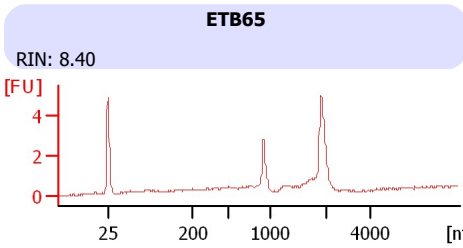
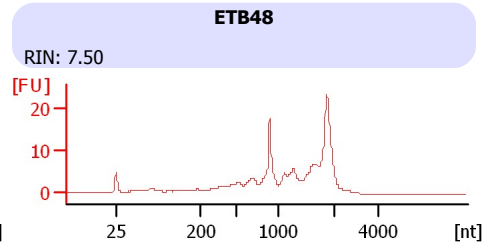
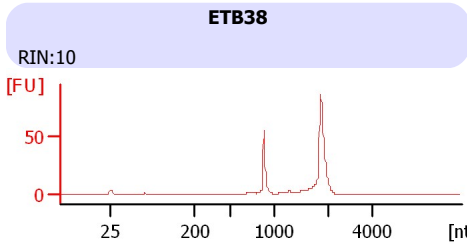
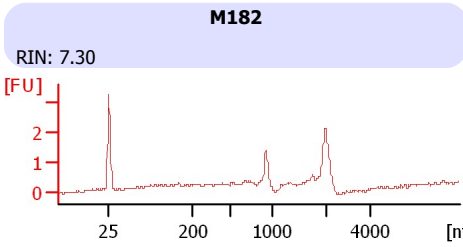
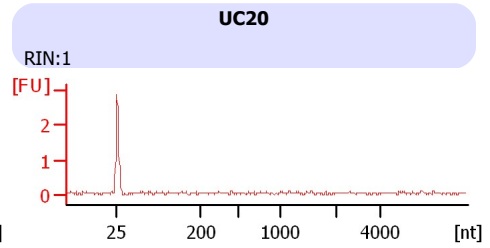
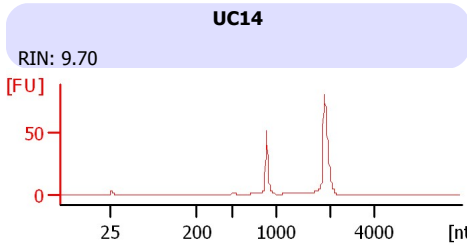
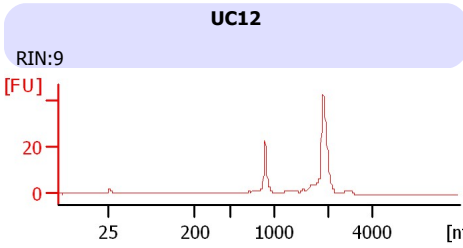
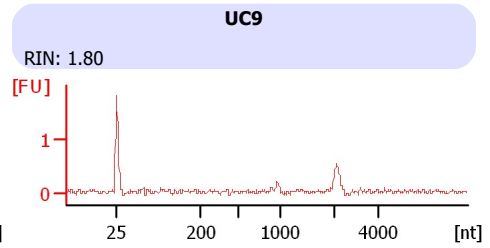
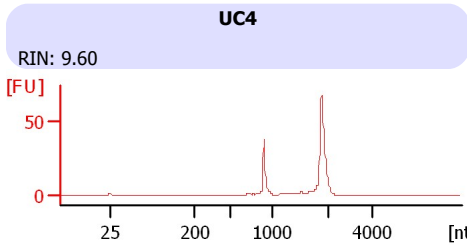
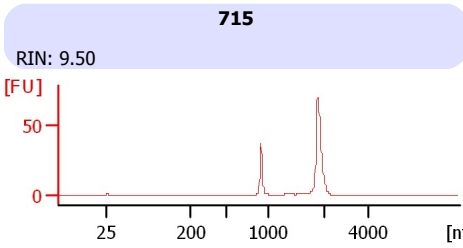
Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA Nano Series II.xsy

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:



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
 Modified: 12/21/2015 1:12:40 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
715		✓	RIN: 9.50	
UC4		✓	RIN: 9.60	
UC9		✓	RIN: 1.80	
UC12		✓	RIN:9	
UC14		✓	RIN: 9.70	
UC20		✓	RIN:1	
M182		✓	RIN: 7.30	
ETB38		✓	RIN:10	
ETB48		✓	RIN: 7.50	
ETB65		✓	RIN: 8.40	
ETB94		✓	RIN:1	
UC137		✓	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\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 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

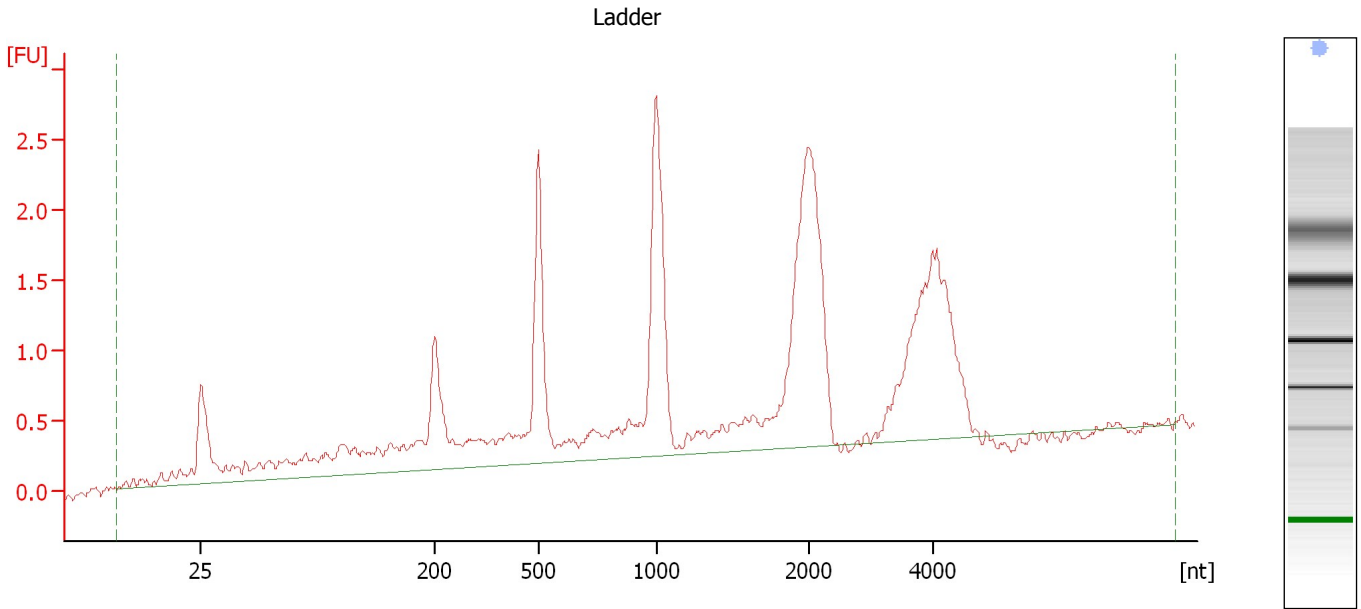
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary**



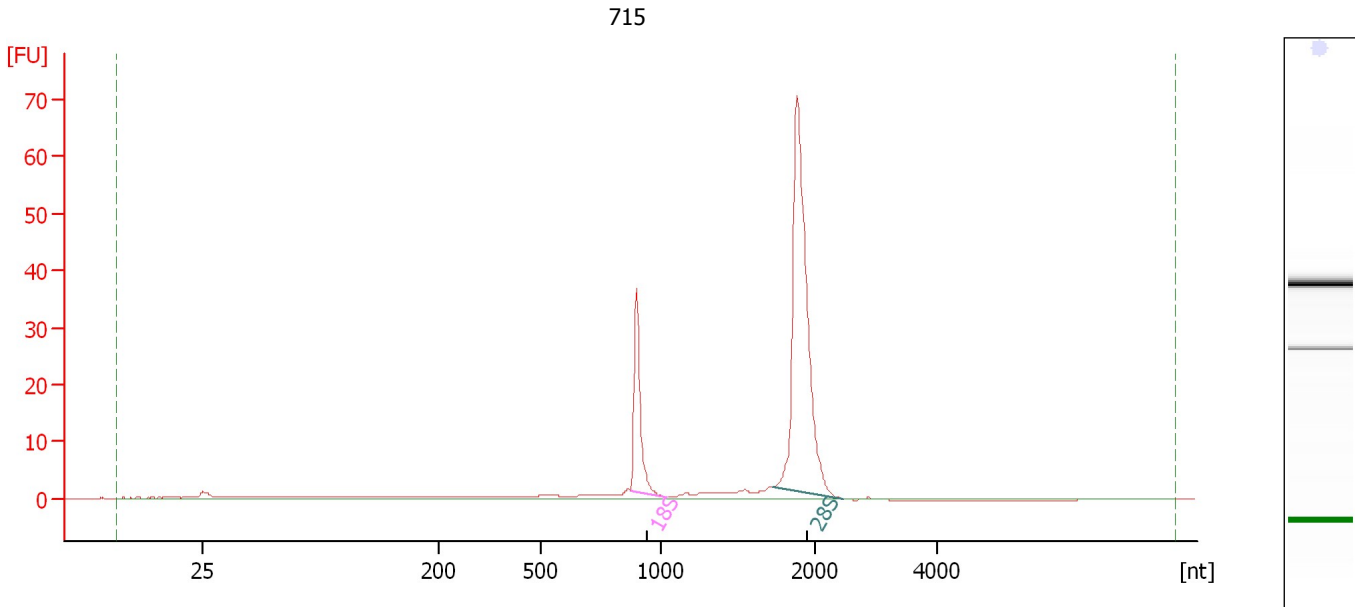
**Overall Results for Ladder**

RNA Area:	30.2	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\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 715**

RNA Area:	168.6	RNA Integrity Number (RIN):	9.5 (B.02.08)
RNA Concentration:	837 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]:	3.6	Result Flagging Label:	RIN: 9.50

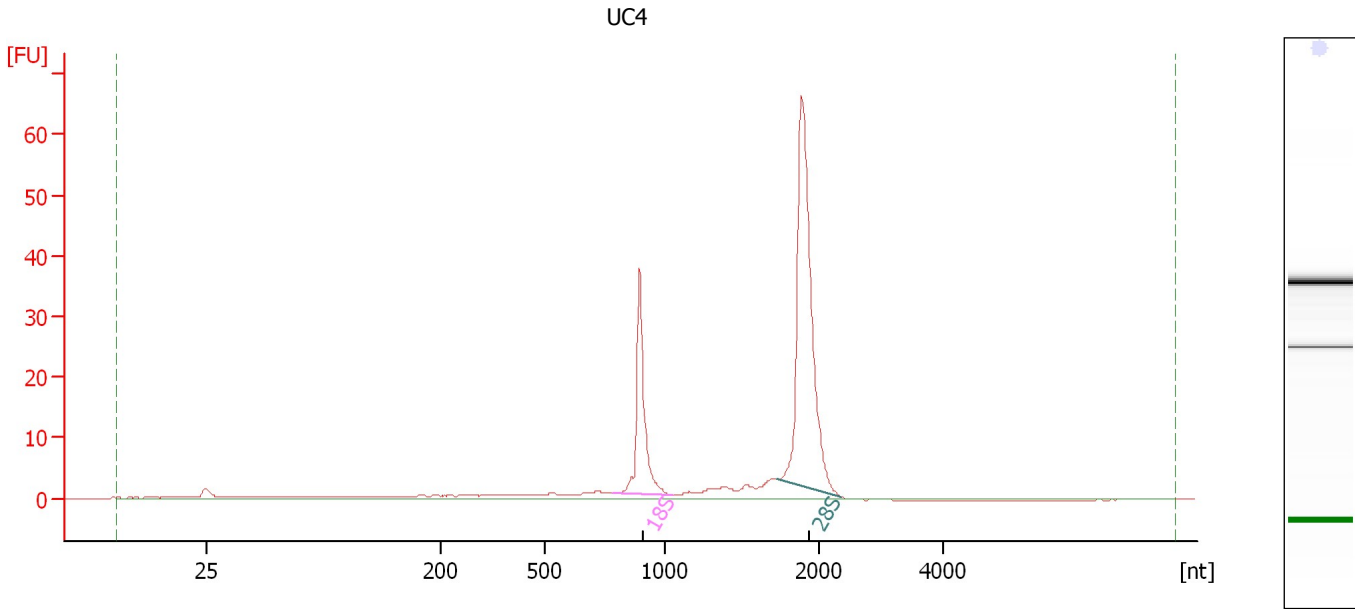
**Fragment table for sample 1 : 715**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	870	1,029	28.2	16.7
28S	1,725	2,460	103.0	61.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : UC4**

RNA Area:	179.4	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	891 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]:	2.7	Result Flagging Label:	RIN: 9.60

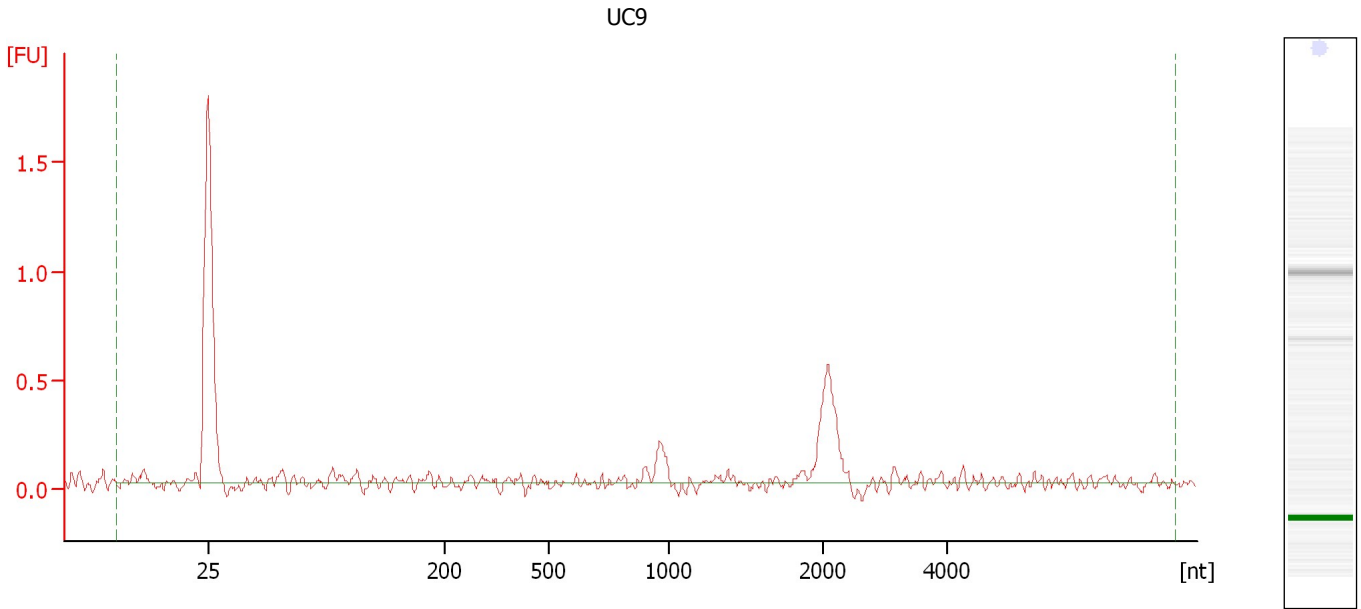
**Fragment table for sample 2 : UC4**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	787	1,058	34.8	19.4
28S	1,723	2,364	93.1	51.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : UC9**

Baseline Plateau [s] : 10

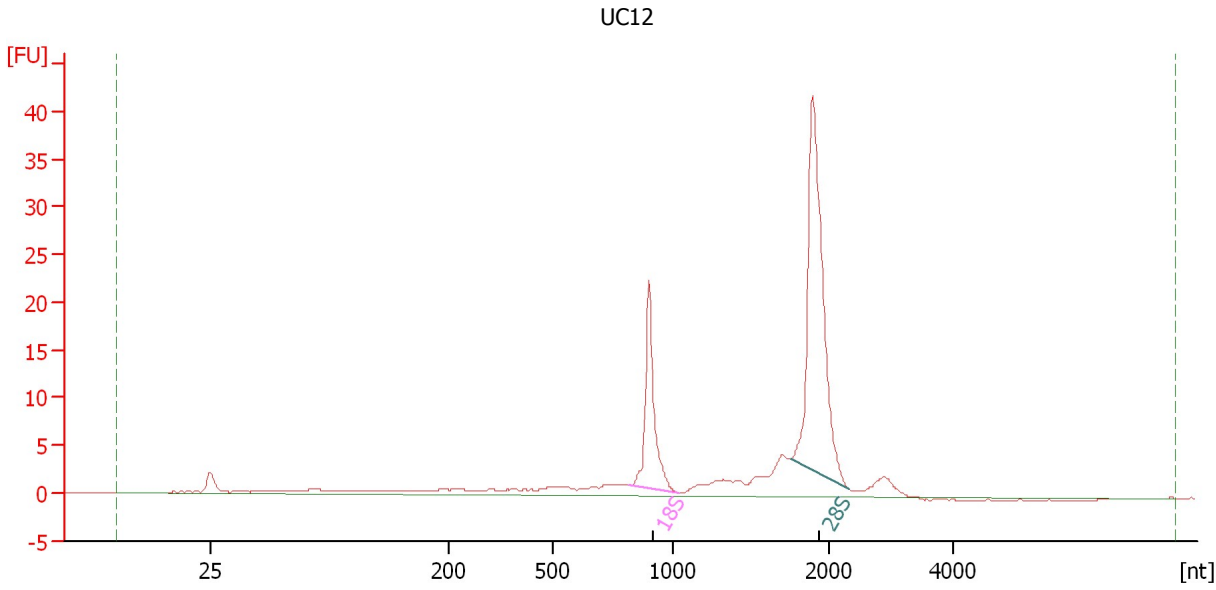
**Overall Results for sample 3 : UC9**

RNA Area:	2.4	RNA Integrity Number (RIN):	1.8 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	12 ng/ $\mu$ l	Result Flagging Color:	<span style="background-color: #ccccff; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 1.80

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : UC12**

RNA Area:	149.7	RNA Integrity Number (RIN):	9 (B.02.08)
RNA Concentration:	743 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]:	2.7	Result Flagging Label:	RIN:9

**Fragment table for sample 4 : UC12**

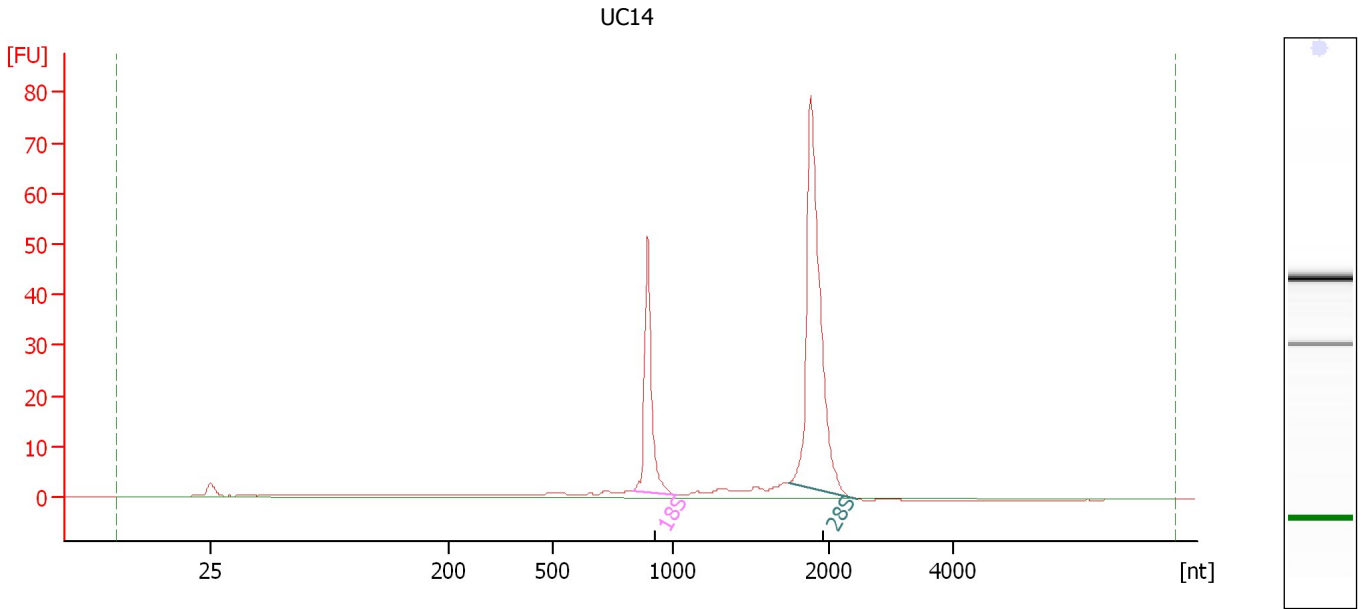
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	817	1,039	22.5	15.0
28S	1,761	2,347	61.2	40.9



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : UC14**

RNA Area:	210.5	RNA Integrity Number (RIN):	9.7 (B.02.08)
RNA Concentration:	1,045 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]:	2.6	Result Flagging Label:	RIN: 9.70

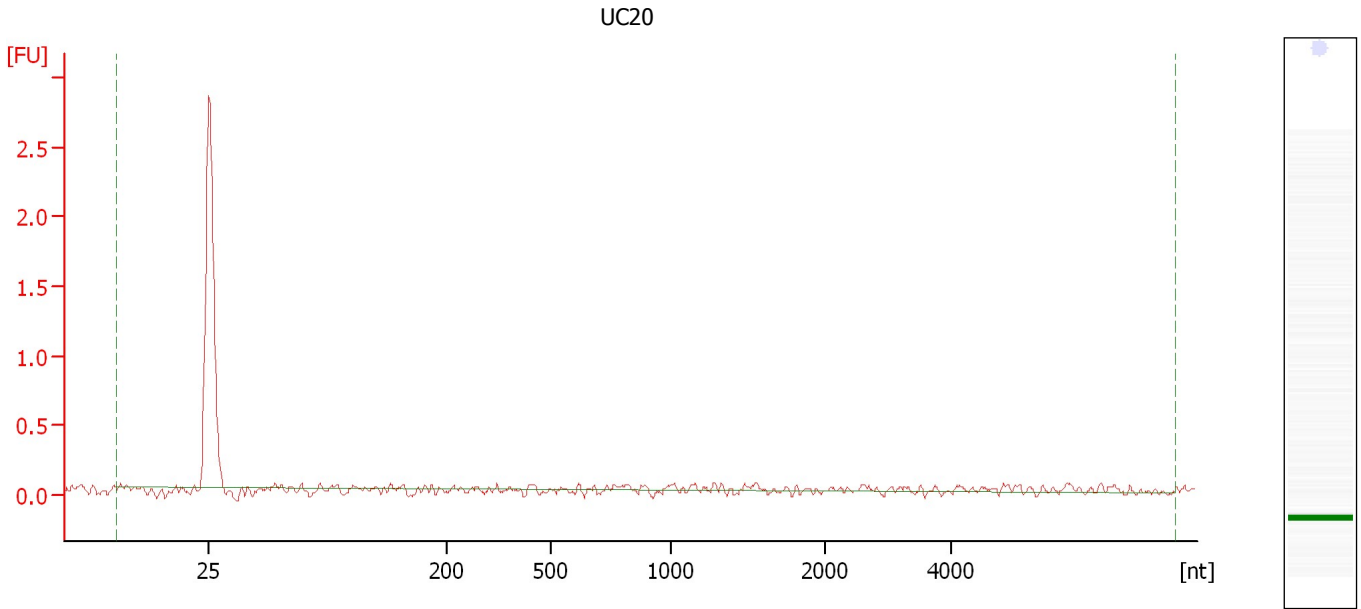
**Fragment table for sample 5 : UC14**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	830	1,025	42.1	20.0
28S	1,747	2,466	108.4	51.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



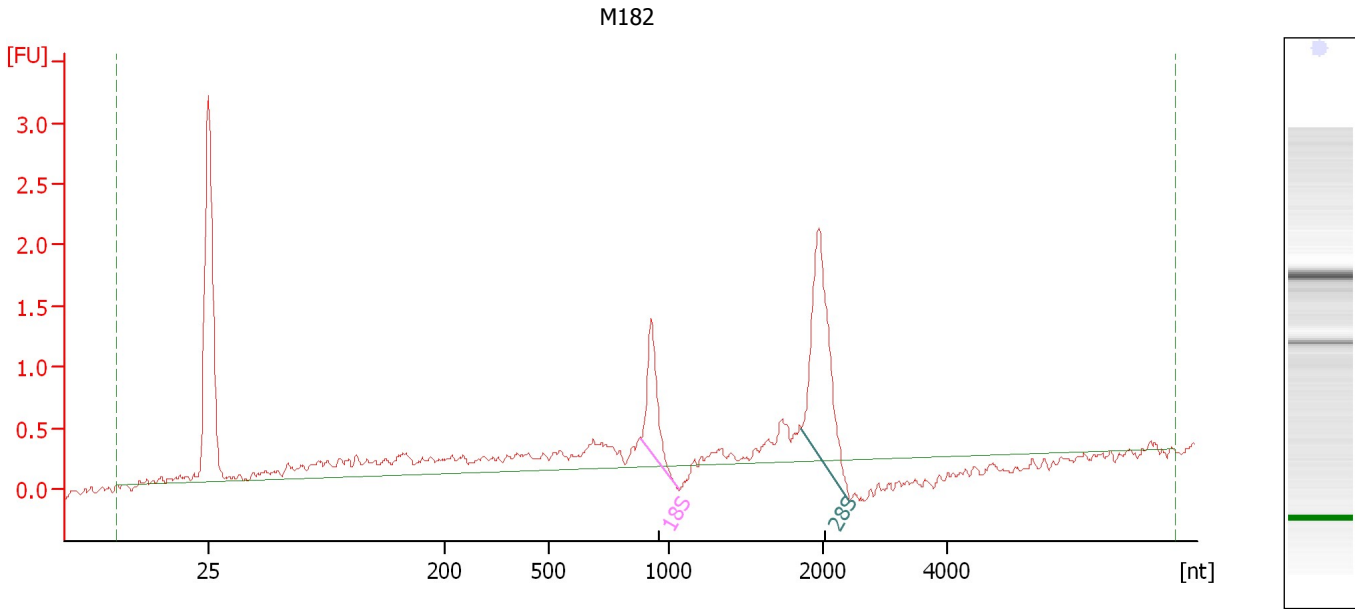
**Overall Results for sample 6 : UC20**

RNA Area:	1.0	RNA Integrity Number (RIN):	1 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	5 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]:	0.0	Result Flagging Label:	RIN:1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : M182**

RNA Area: 13.1                      RNA Integrity Number (RIN): 7.3 (B.02.08)  
RNA Concentration: 65 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.5                      Result Flagging Label: RIN: 7.30

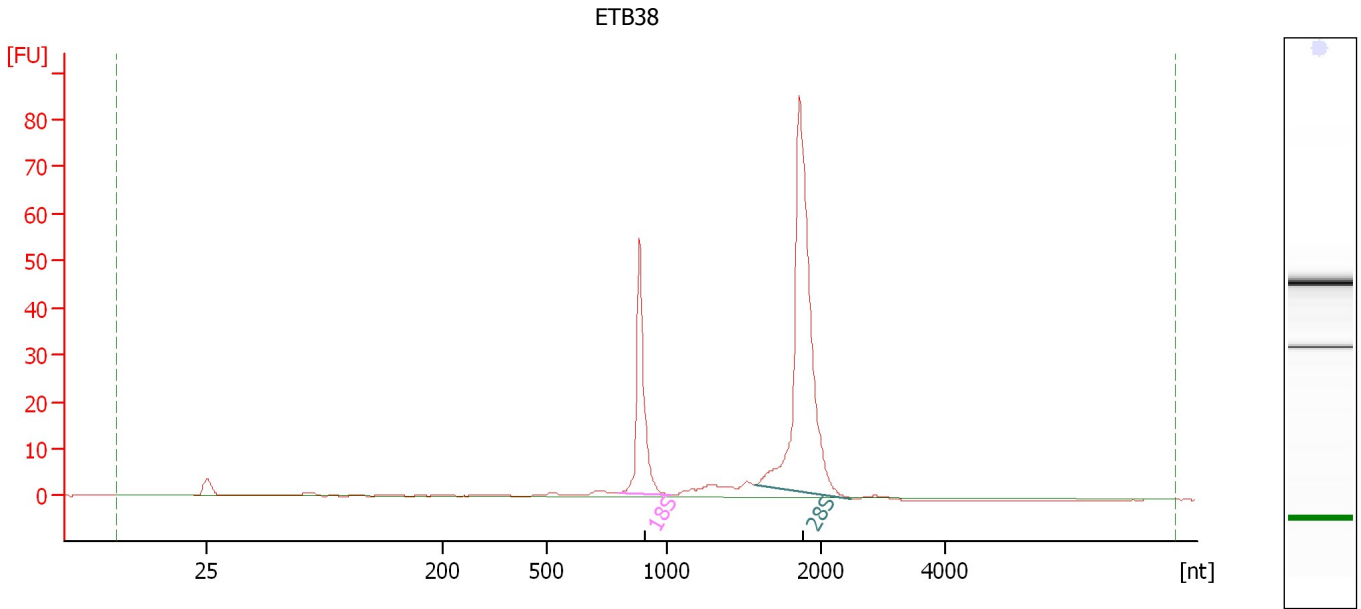
**Fragment table for sample 7 : M182**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	886	1,059	1.3	10.0
28S	1,859	2,424	3.3	25.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : ETB38**

RNA Area:	240.2	RNA Integrity Number (RIN):	10 (B.02.08)
RNA Concentration:	1,193 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]:	2.8	Result Flagging Label:	RIN:10

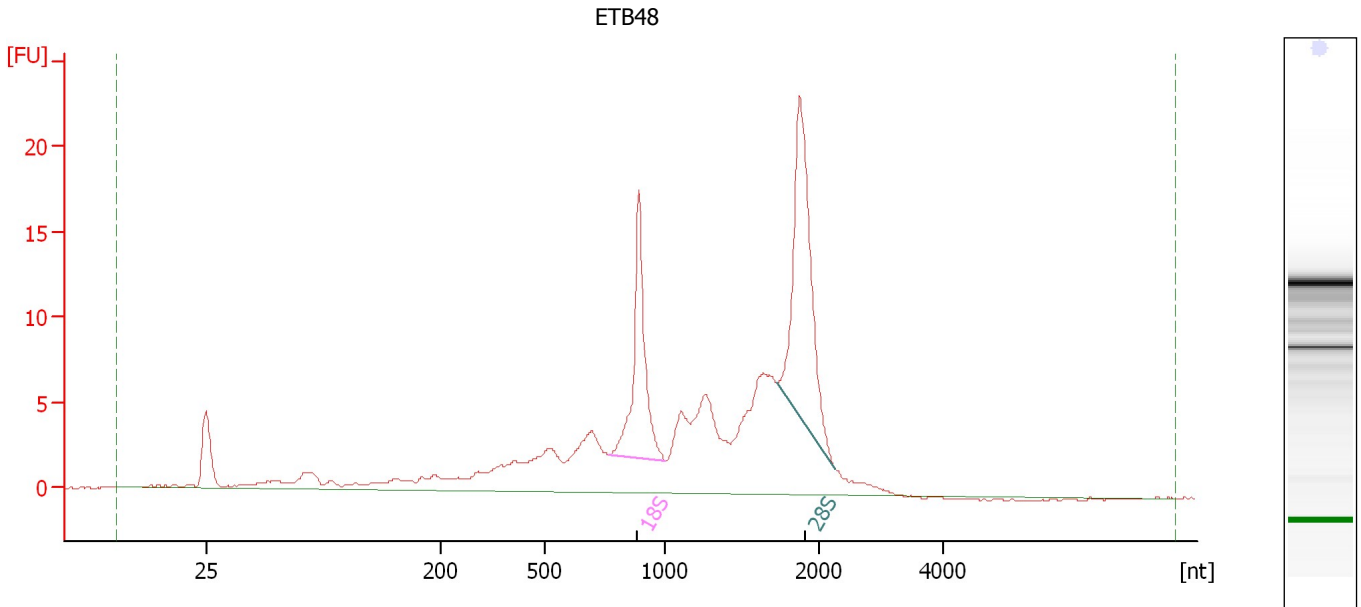
**Fragment table for sample 8 : ETB38**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	797	1,030	49.1	20.4
28S	1,570	2,480	137.1	57.1

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
 Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : ETB48**

RNA Area:	190.9	RNA Integrity Number (RIN):	7.5 (B.02.08)
RNA Concentration:	948 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: 7.50

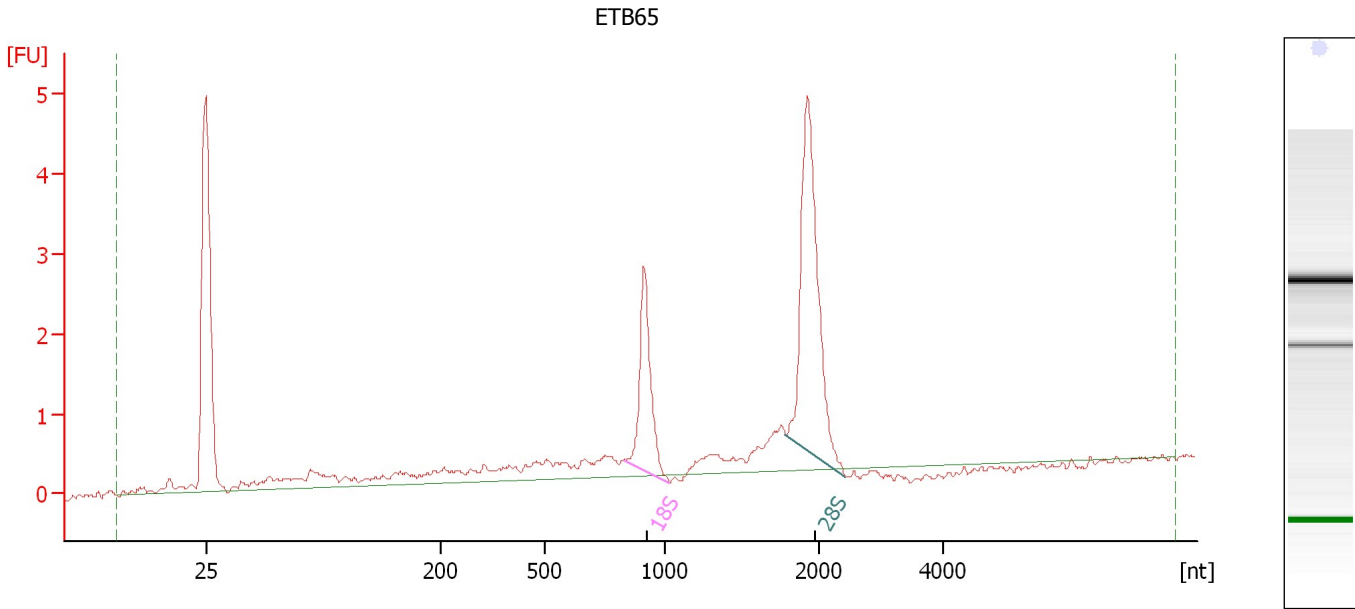
**Fragment table for sample 9 : ETB48**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	764	1,002	20.9	11.0
28S	1,723	2,261	34.2	17.9

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : ETB65**

RNA Area: 23.6                      RNA Integrity Number (RIN): 8.4 (B.02.08)  
RNA Concentration: 117 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.3              Result Flagging Label: RIN: 8.40

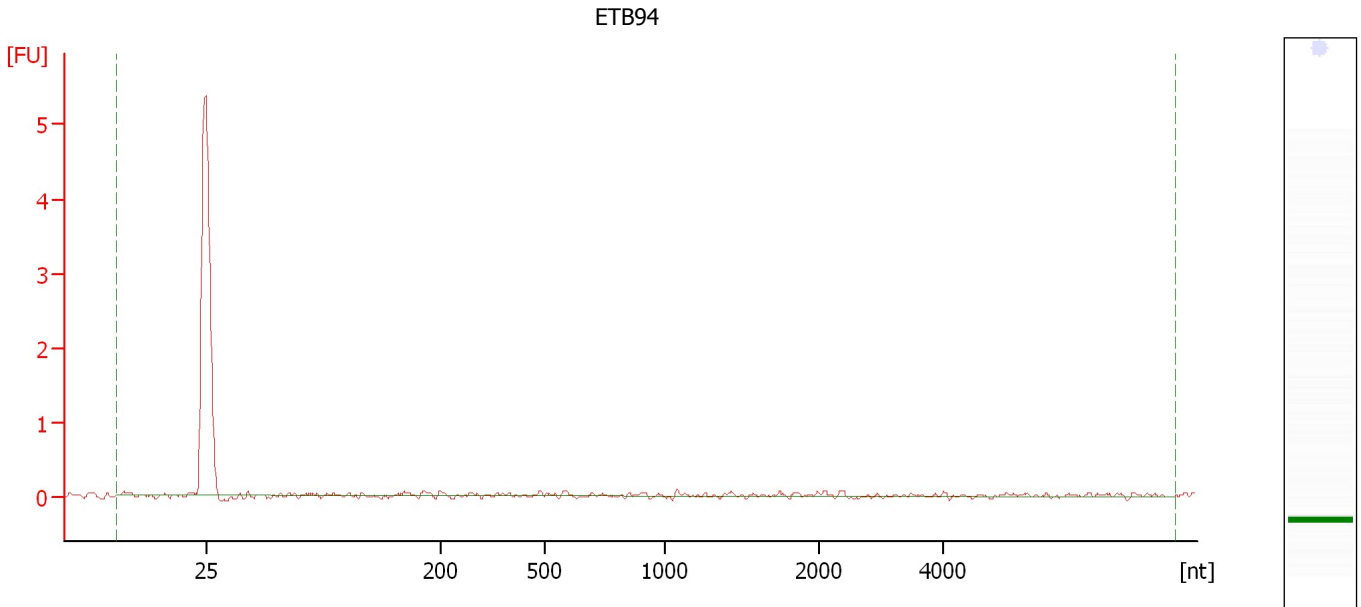
**Fragment table for sample 10 : ETB65**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	836	1,030	3.3	13.9
28S	1,786	2,433	7.7	32.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



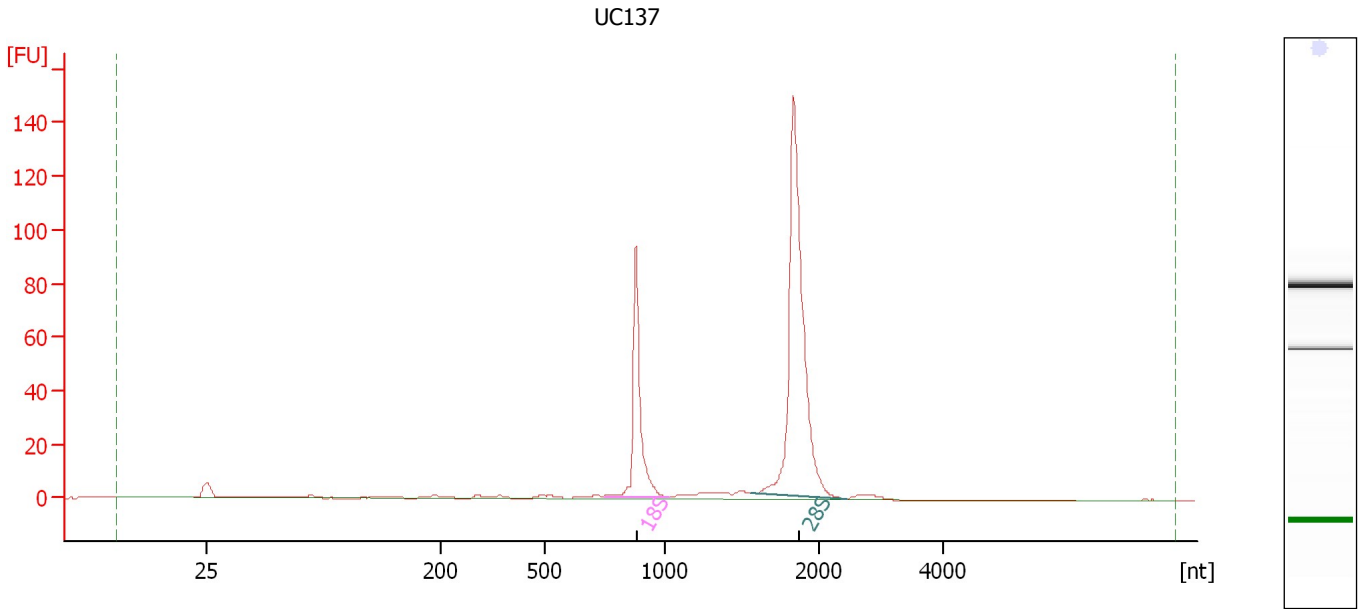
**Overall Results for sample 11 : ETB94**

RNA Area:	1.5	RNA Integrity Number (RIN):	1 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	8 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]:	0.0	Result Flagging Label:	RIN:1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : UC137**

RNA Area: 361.3                      RNA Integrity Number (RIN): 10 (B.02.08)  
RNA Concentration: 1,794 ng/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 2.6                      Result Flagging Label: RIN:10

**Fragment table for sample 12 : UC137**

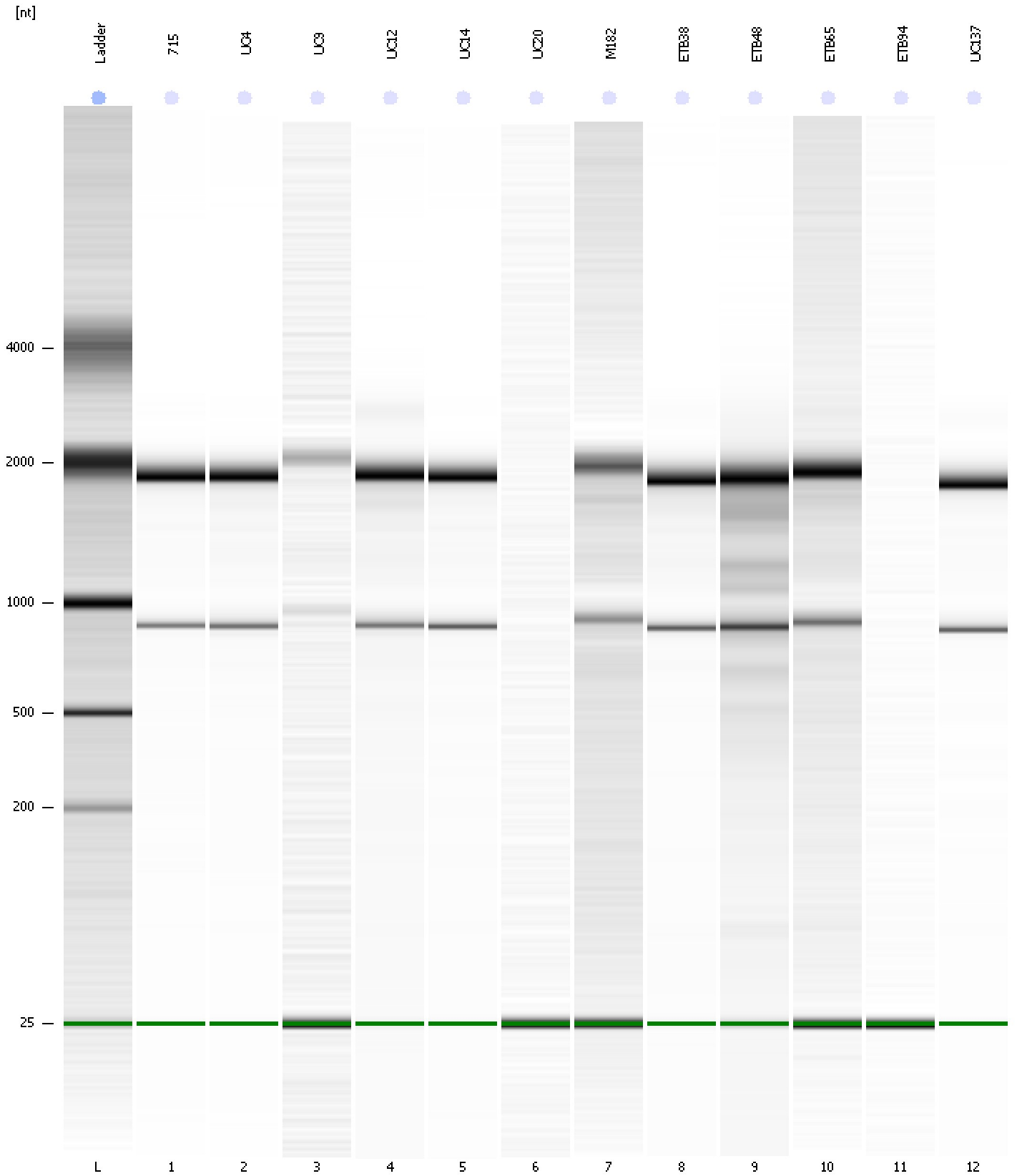
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	747	1,023	82.8	22.9
28S	1,564	2,450	214.7	59.4



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
Modified: 12/21/2015 1:12:40 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-12-21\2015-12-21\_003.xad

Created: 12/21/2015 12:46:43 PM  
 Modified: 12/21/2015 1:12:40 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		12/21/2015 1:09:46 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-12-21\2015-12-21_003.xad)		Instrument	Run		12/21/2015 12:46:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		12/21/2015 12:46:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		12/21/2015 12:46:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		12/21/2015 12:46:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		12/21/2015 12:46:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		12/21/2015 12:46:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		12/21/2015 12:46:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1