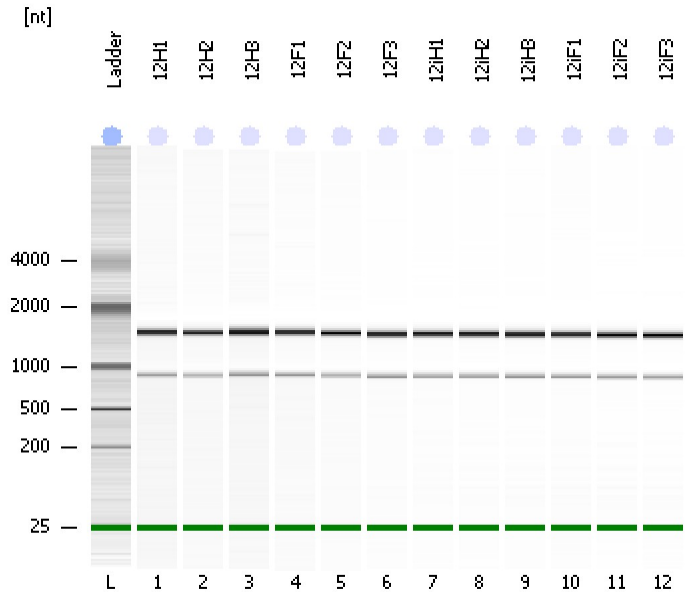


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152      Firmware: C.01.069  
Serial#: DE34903152      Type: G2938C

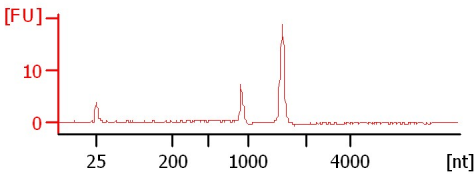
Assay Information:

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.

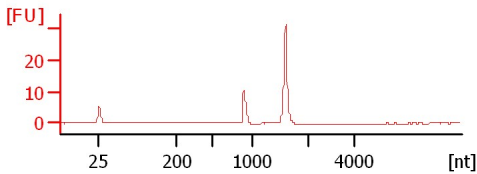
Chip Information:

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

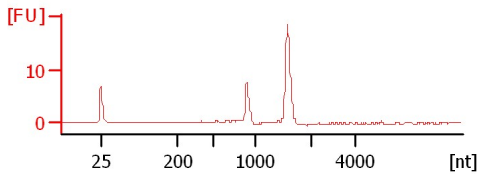
**12H1**  
RIN: 8.40



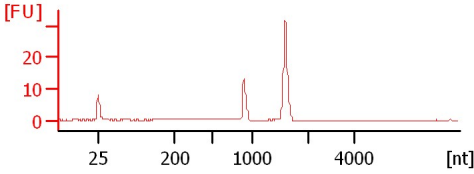
**12H2**  
RIN: 8.10



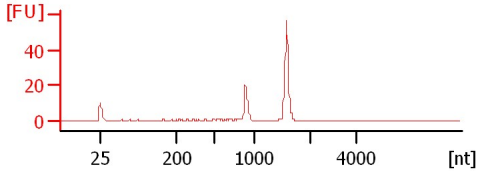
**12H3**  
RIN: 8.70



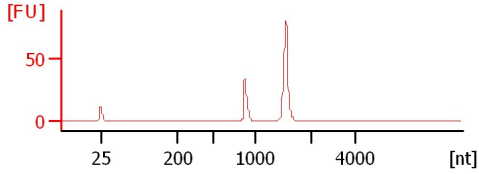
**12F1**  
RIN: 8.70



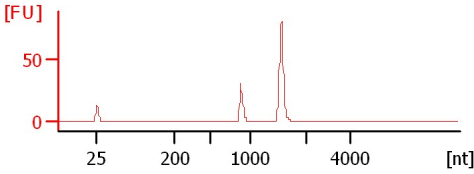
**12F2**  
RIN: 8.60



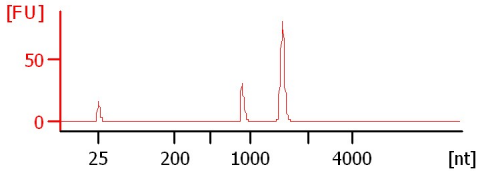
**12F3**  
RIN: 9.20



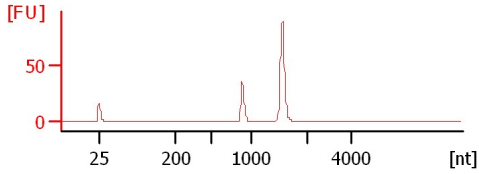
**12iH1**  
RIN: 9.10



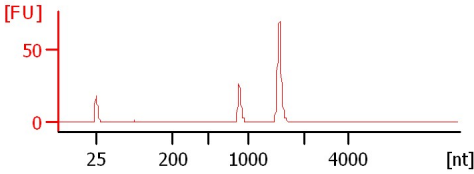
**12iH2**  
RIN: 9.30



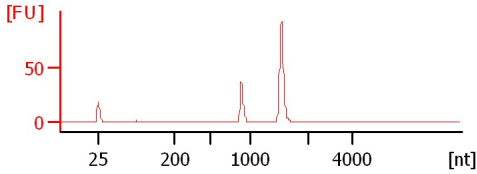
**12iH3**  
RIN: 9.50



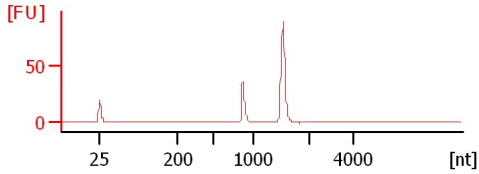
**12iF1**  
RIN: 9.40



**12iF2**  
RIN: 9.50



**12iF3**  
RIN: 9.50



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
12H1		✓	RIN: 8.40	
12H2		✓	RIN: 8.10	
12H3		✓	RIN: 8.70	
12F1		✓	RIN: 8.70	
12F2		✓	RIN: 8.60	
12F3		✓	RIN: 9.20	
12iH1		✓	RIN: 9.10	
12iH2		✓	RIN: 9.30	
12iH3		✓	RIN: 9.50	
12iF1		✓	RIN: 9.40	
12iF2		✓	RIN: 9.50	
12iF3		✓	RIN: 9.50	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 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/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

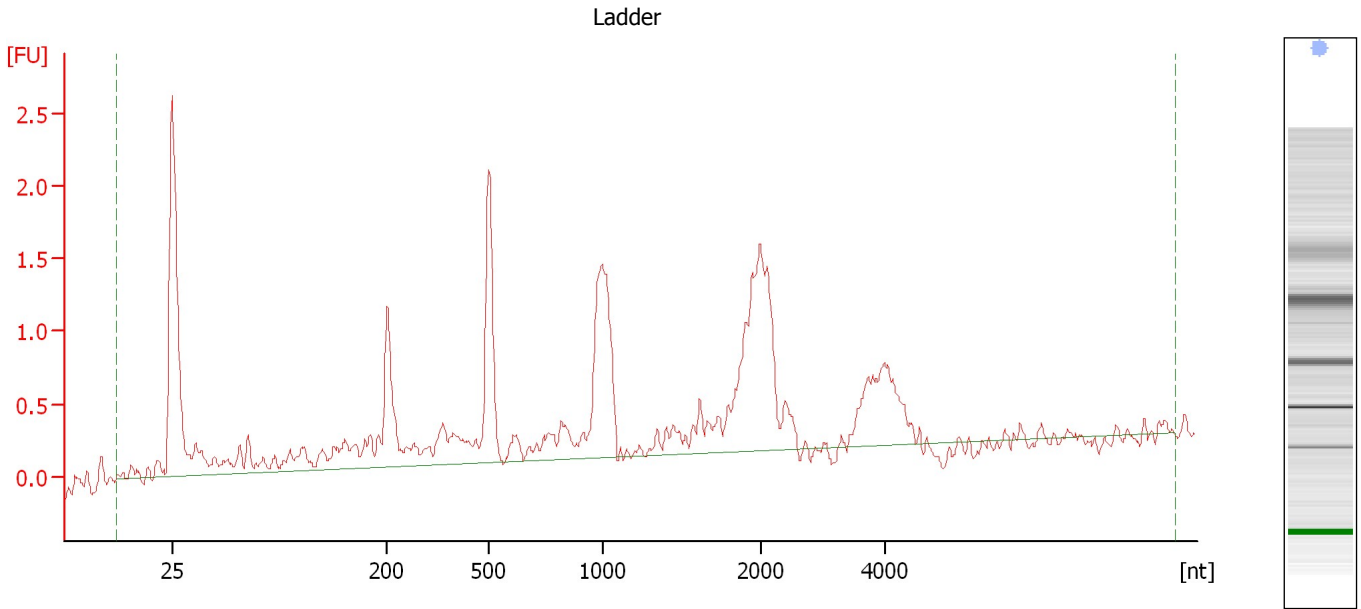
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary**



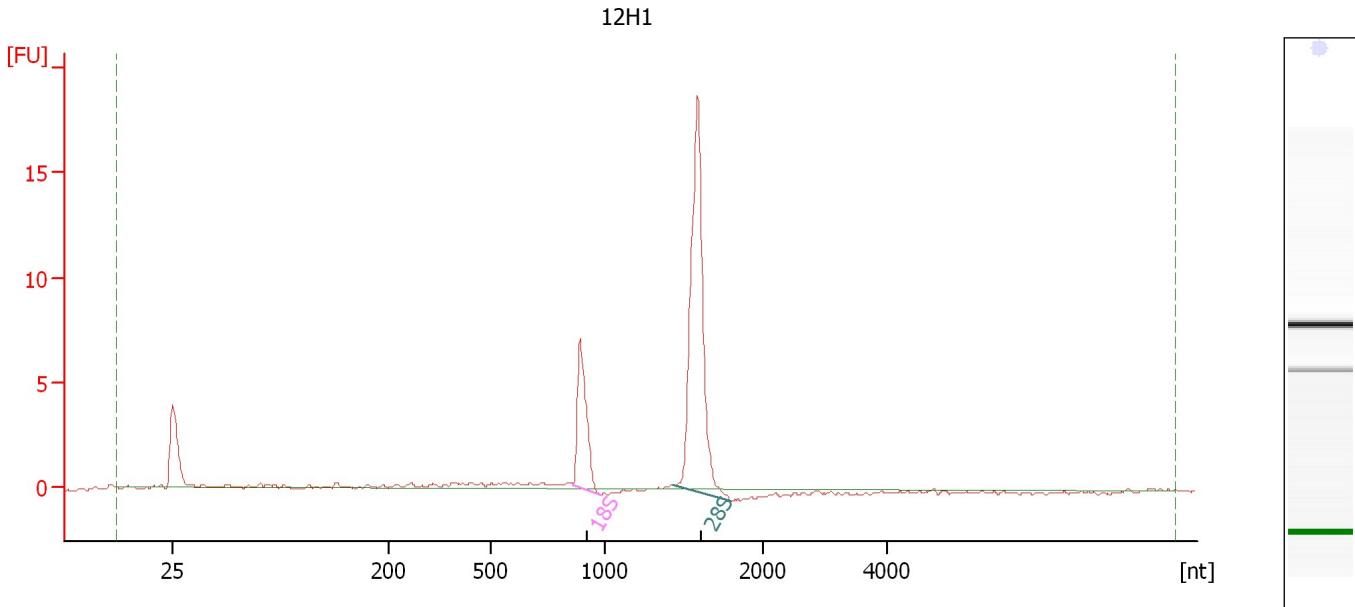
**Overall Results for Ladder**

RNA Area:	20.9	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	150 ng/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 12H1**

RNA Area:	40.0	RNA Integrity Number (RIN):	8.4 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	287 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]:	3.3	Result Flagging Label:	RIN: 8.40

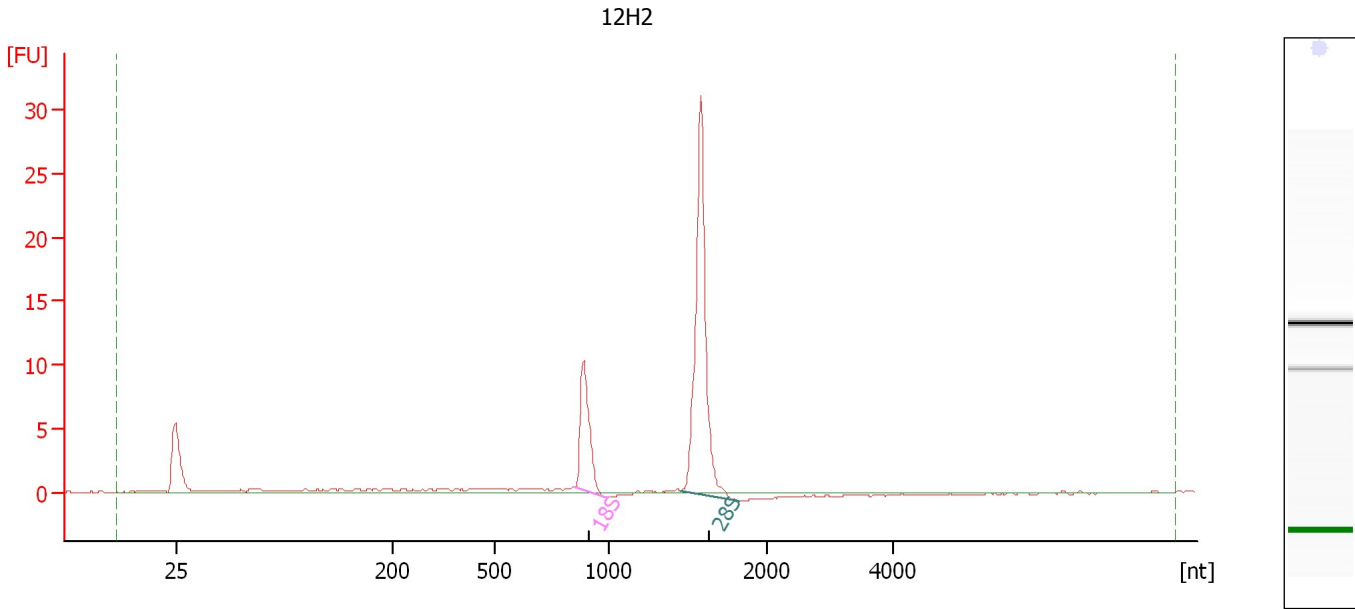
**Fragment table for sample 1 : 12H1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	863	981	8.0	20.0
28S	1,432	1,802	26.1	65.3

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 12H2**

RNA Area:	58.9	RNA Integrity Number (RIN):	8.1 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	423 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]:	3.1	Result Flagging Label:	RIN: 8.10

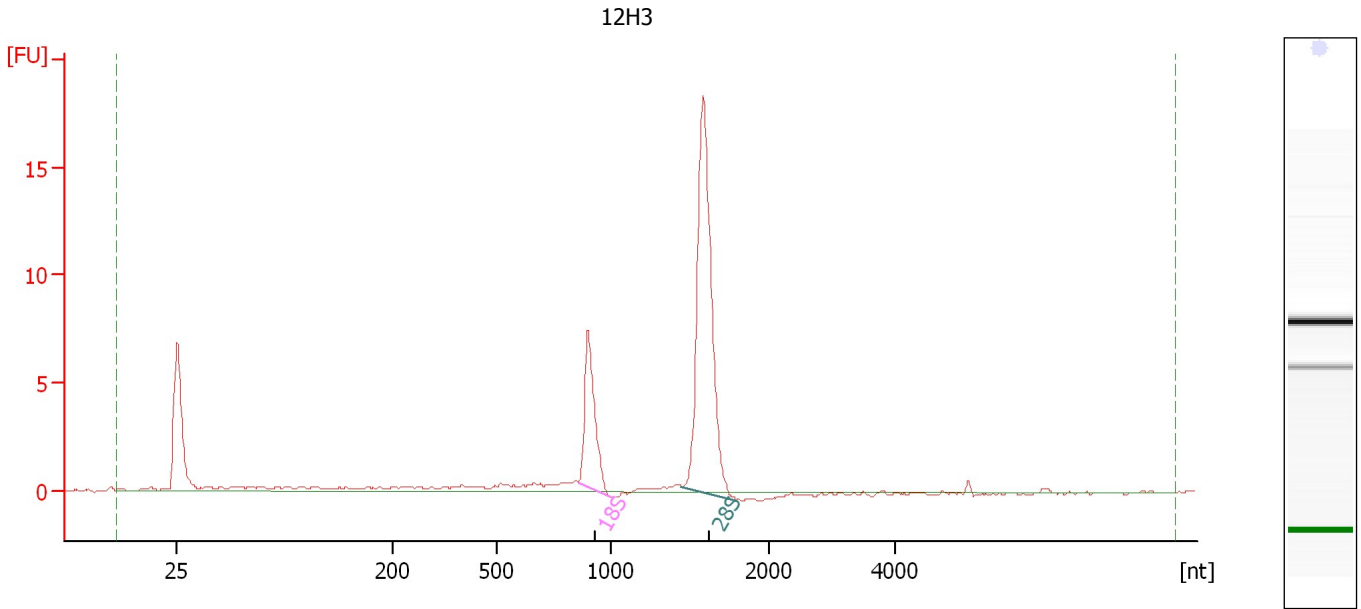
**Fragment table for sample 2 : 12H2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	856	982	11.7	19.8
28S	1,451	1,827	35.9	60.9

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 12H3**

RNA Area:	49.9	RNA Integrity Number (RIN):	8.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	358 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]:	3.1	Result Flagging Label:	RIN: 8.70

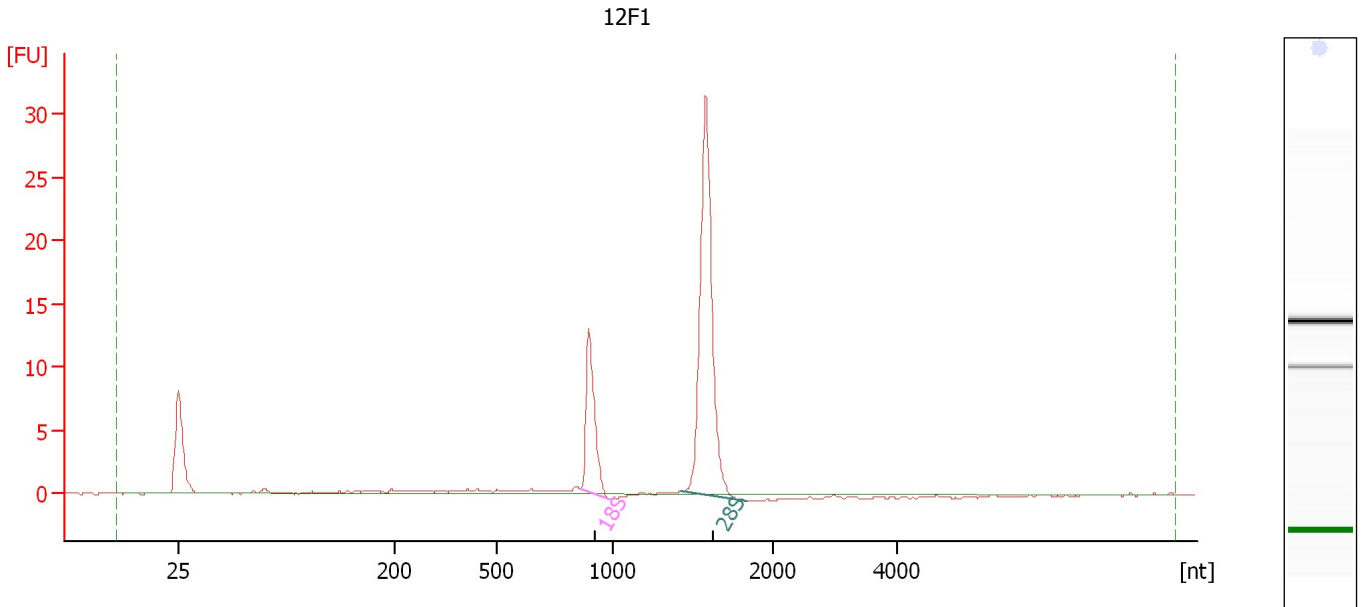
**Fragment table for sample 3 : 12H3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	861	1,002	9.5	19.1
28S	1,444	1,792	29.9	60.0

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 12F1**

RNA Area:	64.4	RNA Integrity Number (RIN):	8.7 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	462 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]:	2.9	Result Flagging Label:	RIN: 8.70

**Fragment table for sample 4 : 12F1**

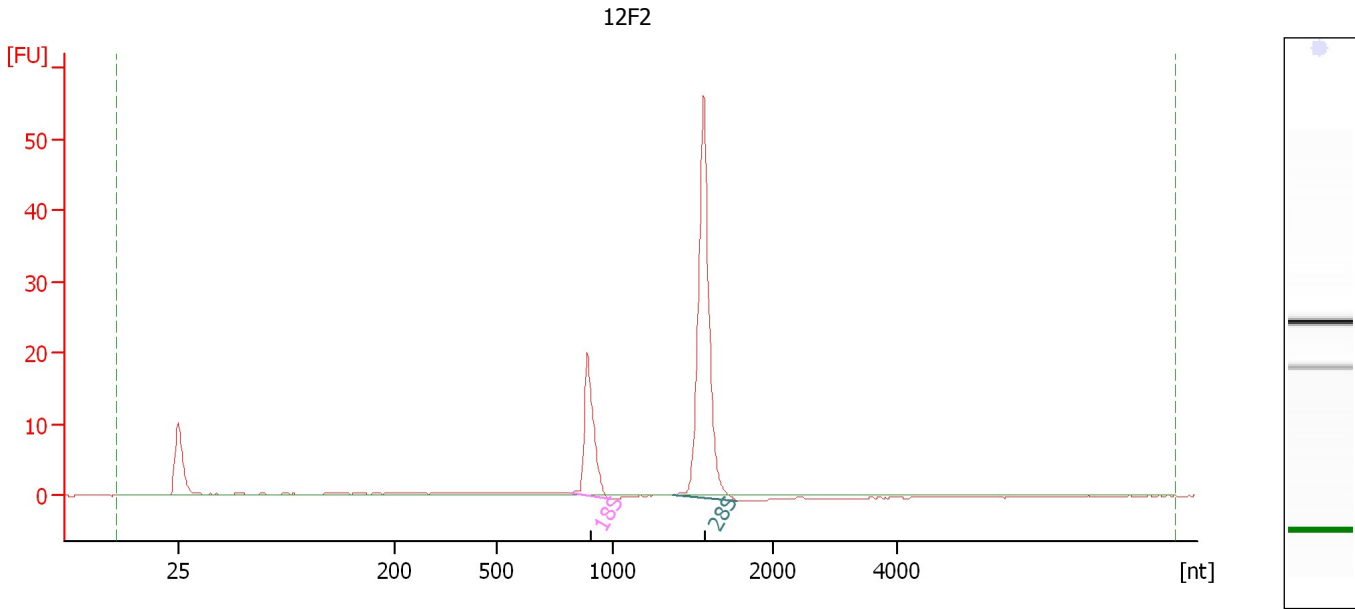
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	866	983	14.7	22.8
28S	1,430	1,844	42.6	66.1



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 12F2**

RNA Area:	105.7	RNA Integrity Number (RIN):	8.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	759 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]:	2.9	Result Flagging Label:	RIN: 8.60

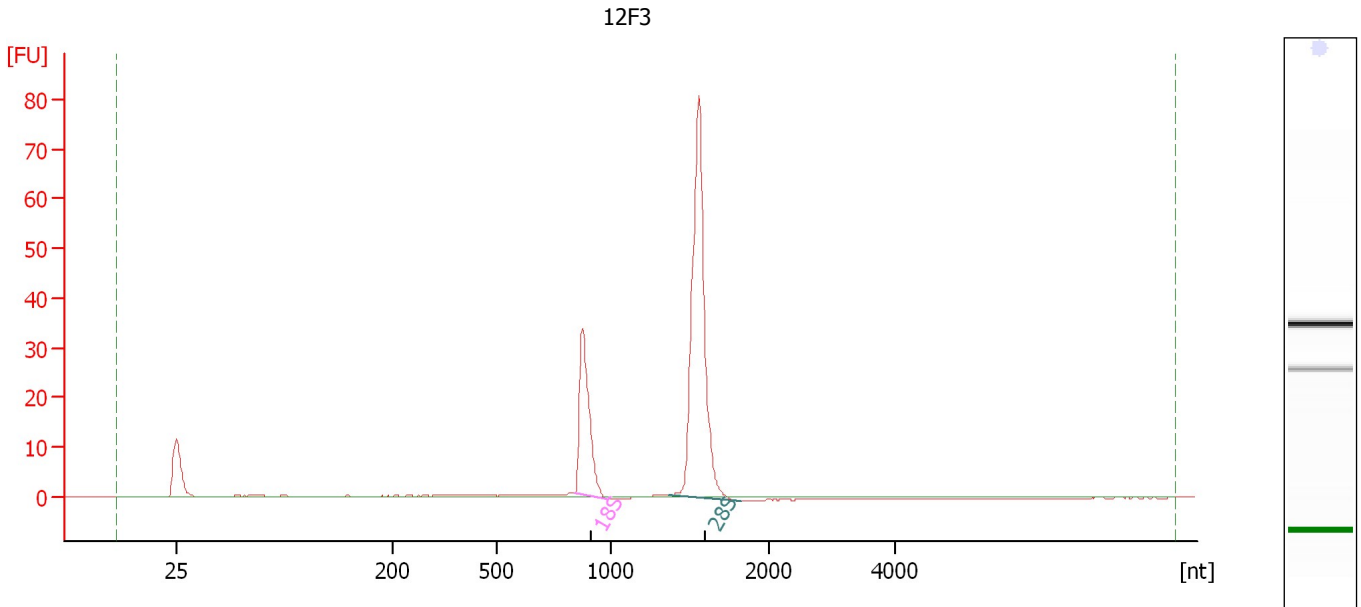
**Fragment table for sample 5 : 12F2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	815	997	24.2	22.9
28S	1,383	1,778	69.8	66.1

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 12F3**

RNA Area:	163.4	RNA Integrity Number (RIN):	9.2 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,172 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: 9.20

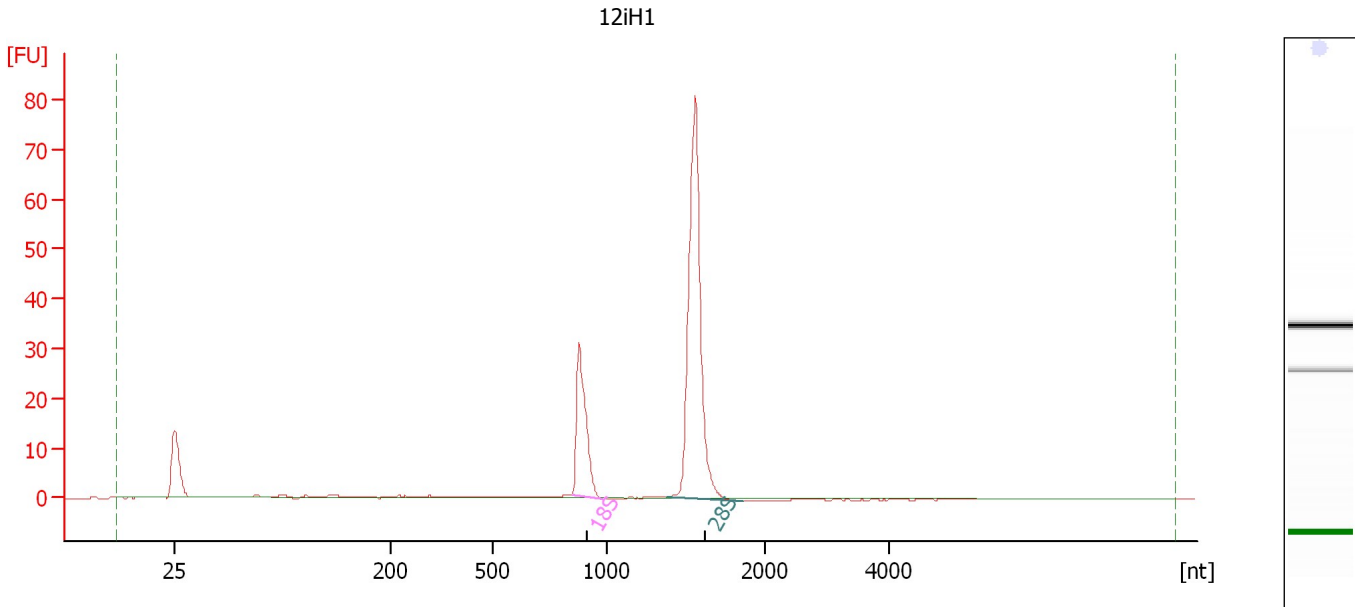
**Fragment table for sample 6 : 12F3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	847	982	40.8	25.0
28S	1,370	1,819	113.3	69.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 12iH1**

RNA Area:	152.8	RNA Integrity Number (RIN):	9.1 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,097 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]:	2.9	Result Flagging Label:	RIN: 9.10

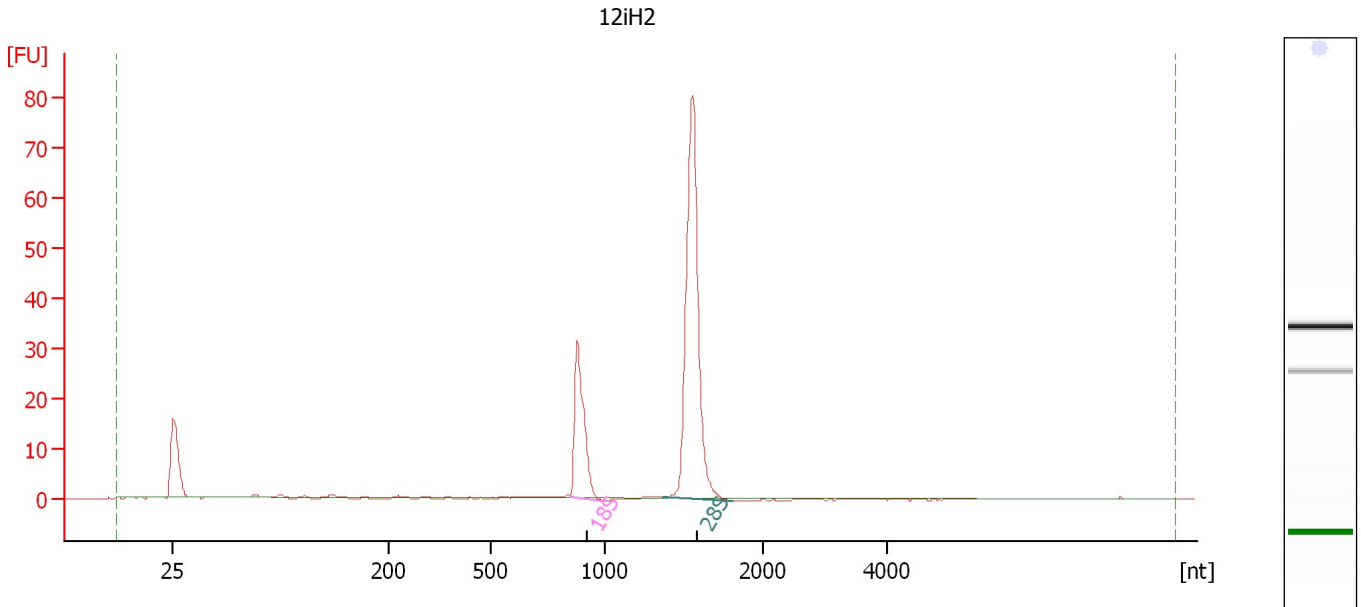
**Fragment table for sample 7 : 12iH1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	850	986	36.7	24.0
28S	1,377	1,855	107.5	70.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 12iH2**

RNA Area:	156.1	RNA Integrity Number (RIN):	9.3 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,120 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]:	2.9	Result Flagging Label:	RIN: 9.30

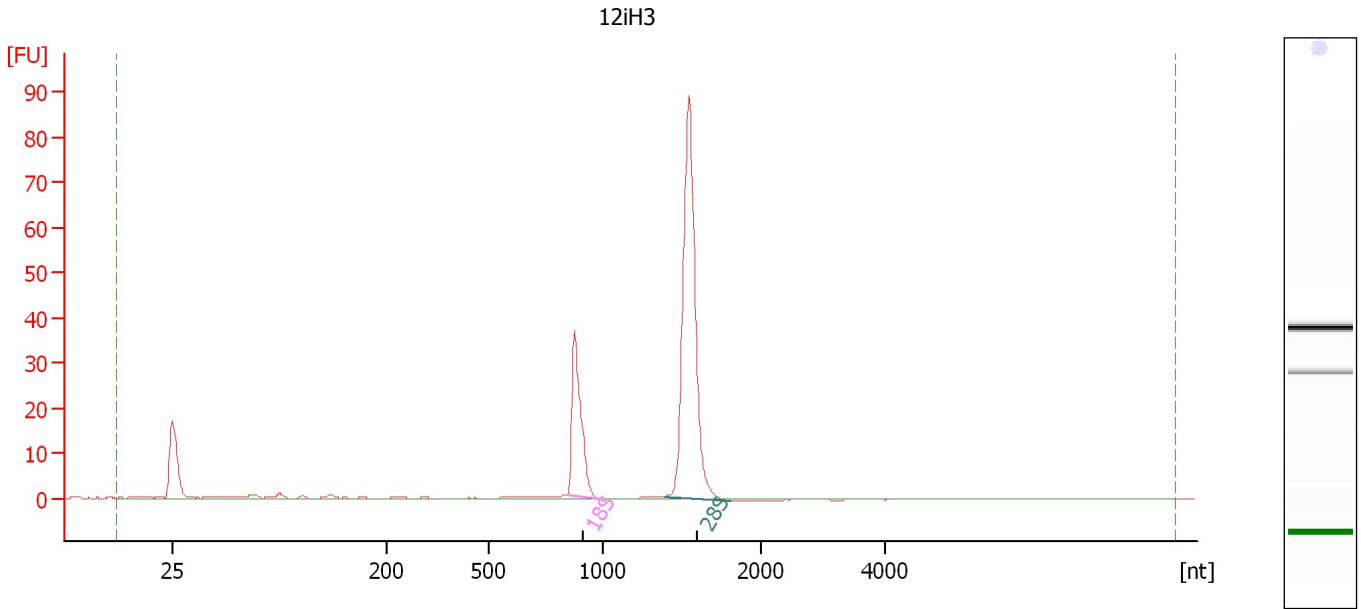
**Fragment table for sample 8 : 12iH2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	849	991	38.2	24.5
28S	1,371	1,816	109.7	70.2

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 12iH3**

RNA Area:	182.7	RNA Integrity Number (RIN):	9.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,311 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]:	2.9	Result Flagging Label:	RIN: 9.50

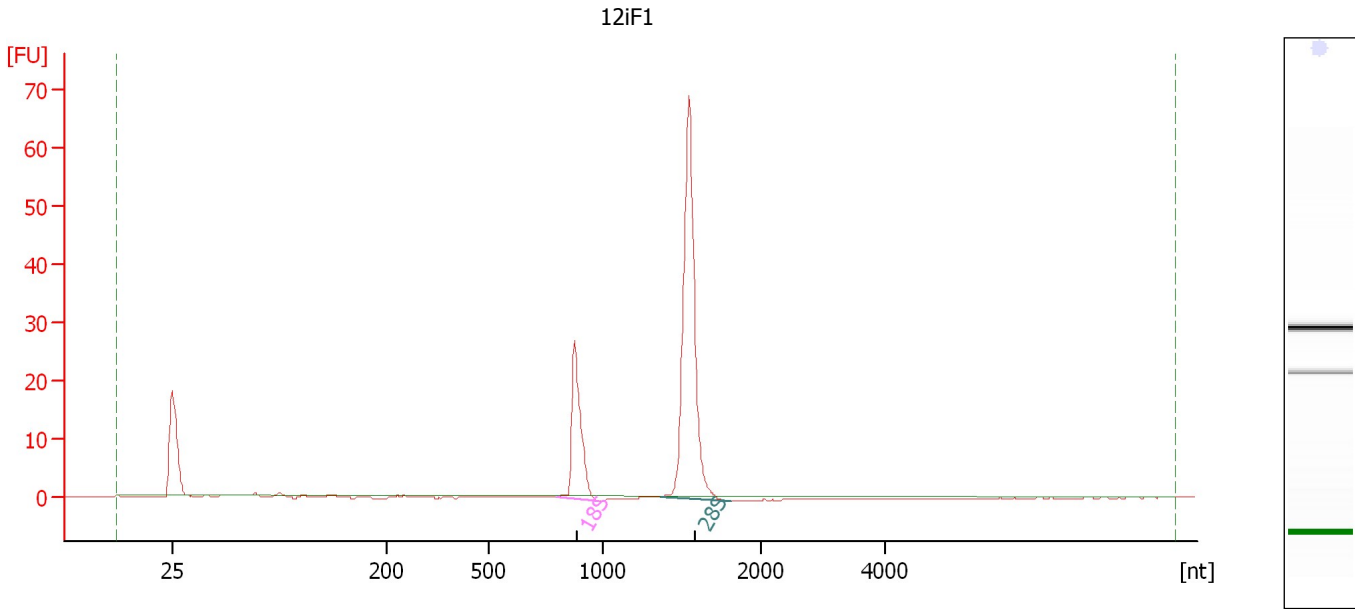
**Fragment table for sample 9 : 12iH3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	844	990	44.0	24.1
28S	1,391	1,817	126.0	69.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 12iF1**

RNA Area: 119.9                      RNA Integrity Number (RIN): 9.4 (B.02.08, Anomaly Threshold(s) manually adapted)  
RNA Concentration: 861 ng/μl  
rRNA Ratio [28s / 18s]: 2.8  
Result Flagging Color:   
Result Flagging Label: RIN: 9.40

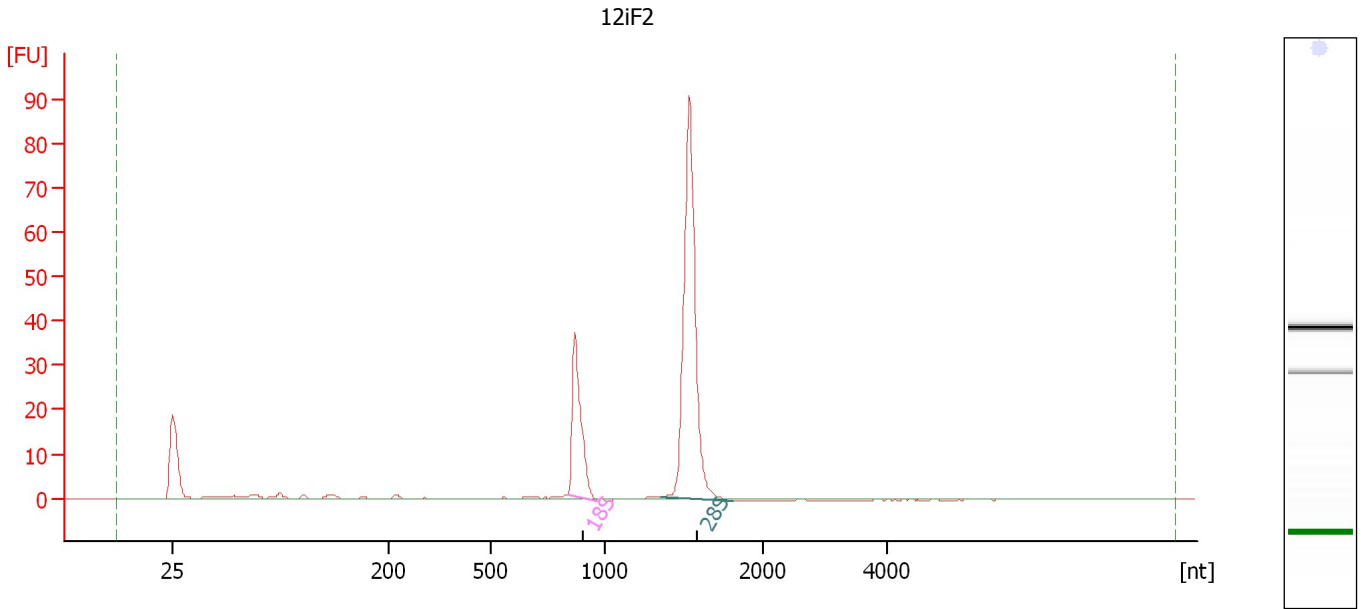
**Fragment table for sample 10 : 12iF1**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	801	985	32.1	26.7
28S	1,371	1,817	89.3	74.4

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 12iF2**

RNA Area:	175.6	RNA Integrity Number (RIN):	9.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,260 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: 9.50

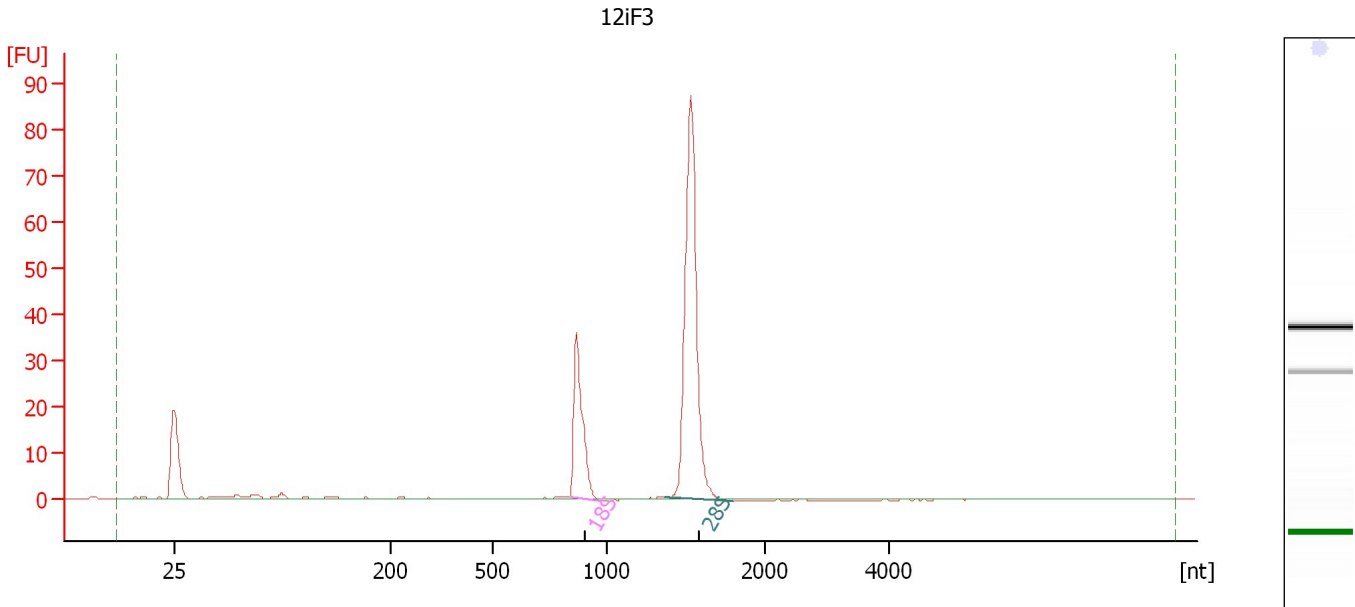
**Fragment table for sample 11 : 12iF2**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	840	972	42.5	24.2
28S	1,357	1,809	118.8	67.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 12iF3**

RNA Area:	161.0	RNA Integrity Number (RIN):	9.5 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	1,155 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: 9.50

**Fragment table for sample 12 : 12iF3**

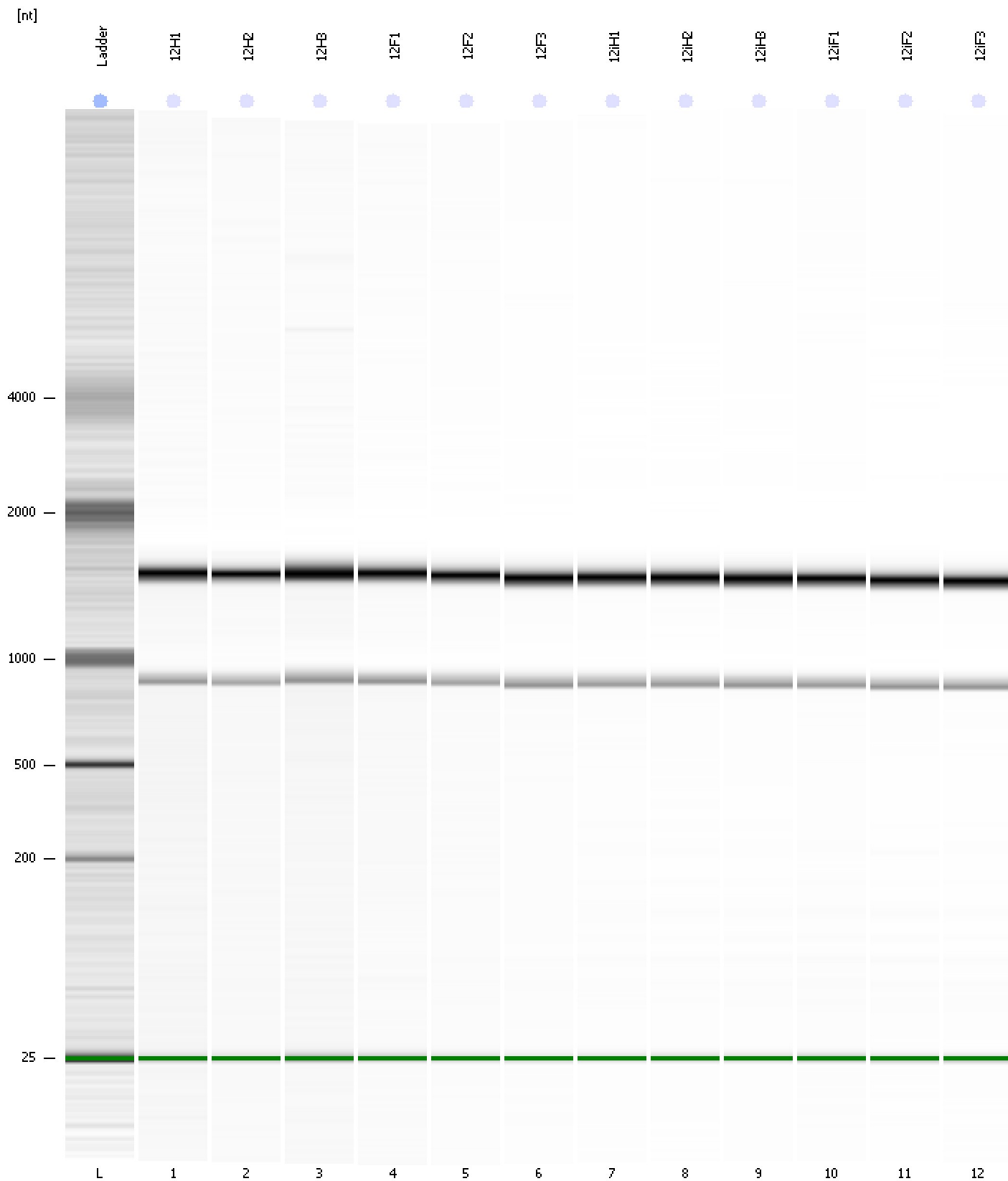
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	841	972	40.4	25.1
28S	1,364	1,801	113.9	70.8



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Gel Image**

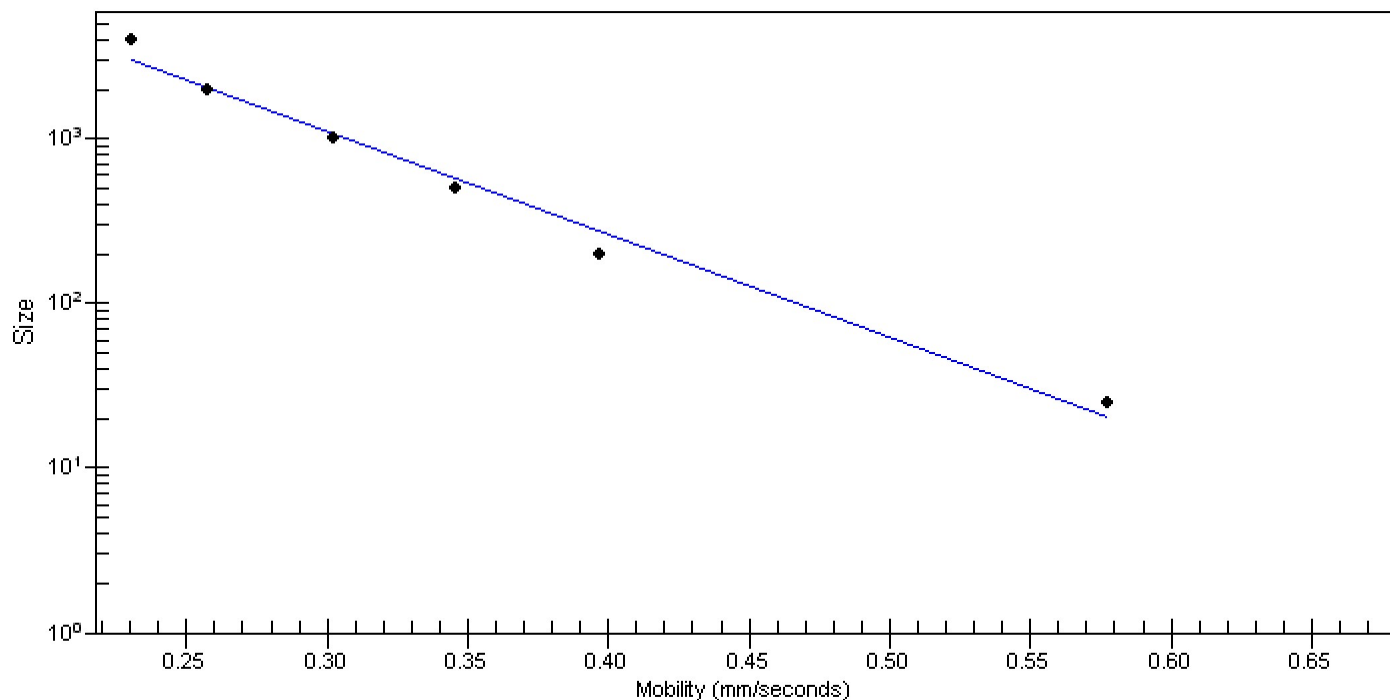


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
Modified: 9/6/2019 11:53:24 AM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2019-09-06\2019-09-06\_001.xad

Created: 9/6/2019 11:29:36 AM  
 Modified: 9/6/2019 11:53:24 AM

**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		9/6/2019 11:53:23 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2019-09-06\2019-09-06_001.xad)		Instrument	Run		9/6/2019 11:29:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938C		Instrument	Run		9/6/2019 11:29:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		9/6/2019 11:29:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		9/6/2019 11:29:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE34903152		Instrument	Run		9/6/2019 11:29:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		9/6/2019 11:29:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		9/6/2019 11:29:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1