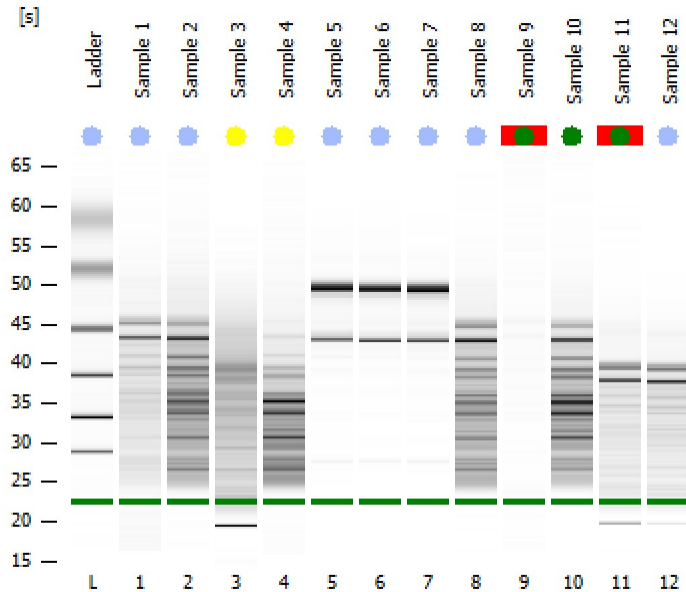


Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

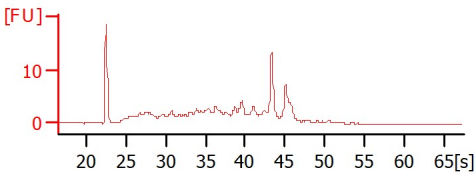
Assay Information:

Assay Origin Path: C:\Program Files (x86)\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\DV200 RNA Nano.sxy  
 Assay Class: Eukaryote Total RNA Nano  
 Version: 2.6  
 Assay Comments: Total RNA Analysis ng sensitivity (Eukaryote)  
 Modified for DV200 Analysis

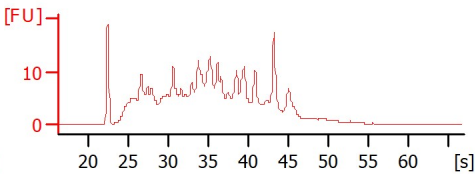
Chip Information:

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

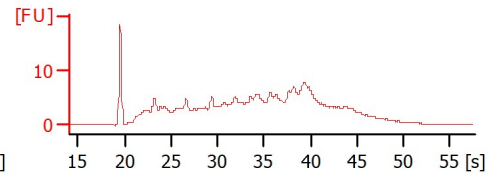
**Sample 1**  
 RIN: 5.40



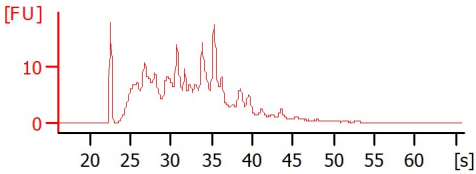
**Sample 2**  
 RIN: 4.20



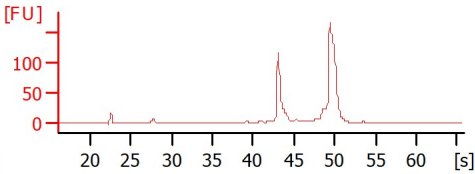
**Sample 3**  
 RIN: 2.80 ; DV200 50-70%



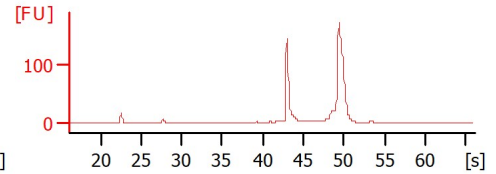
**Sample 4**  
 RIN: 2.70 ; DV200 50-70%



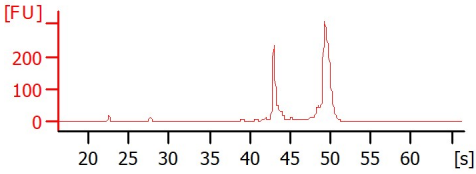
**Sample 5**  
 RIN:10



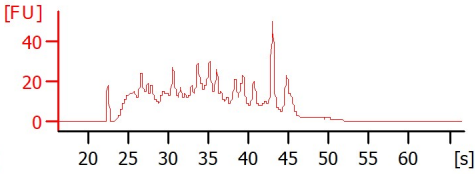
**Sample 6**  
 RIN:10



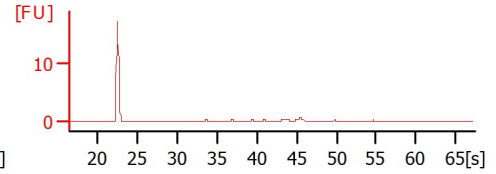
**Sample 7**  
 RIN:10



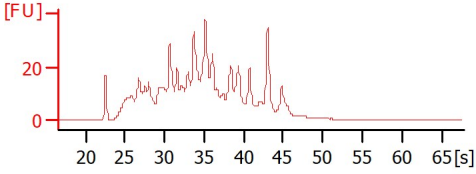
**Sample 8**  
 RIN:4



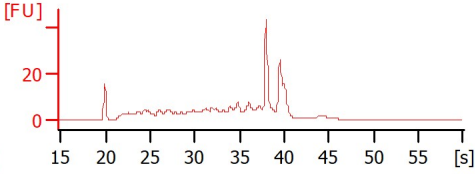
**Sample 9**  
 RIN N/A ; DV200 > 70%



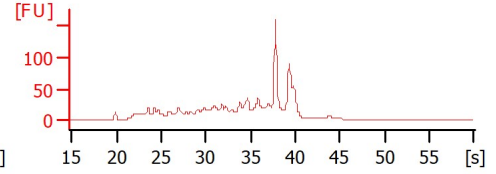
**Sample 10**  
 RIN: 3.80 ; DV200 > 70%



**Sample 11**  
 RIN N/A ; DV200 > 70%
















**Sample 12**  
 RIN:5



Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
Sample 1		✓	RIN: 5.40	
Sample 2		✓	RIN: 4.20	
Sample 3		✓	RIN: 2.80 ; DV200 50-70%	
Sample 4		✓	RIN: 2.70 ; DV200 50-70%	
Sample 5		✓	RIN:10	
Sample 6		✓	RIN:10	
Sample 7		✓	RIN:10	
Sample 8		✓	RIN:4	
Sample 9		✓	RIN N/A ; DV200 > 70%	
Sample 10		✓	RIN: 3.80 ; DV200 >	
Sample 11		✓	RIN N/A ; DV200 > 70%	
Sample 12		✓	RIN:5	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 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/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

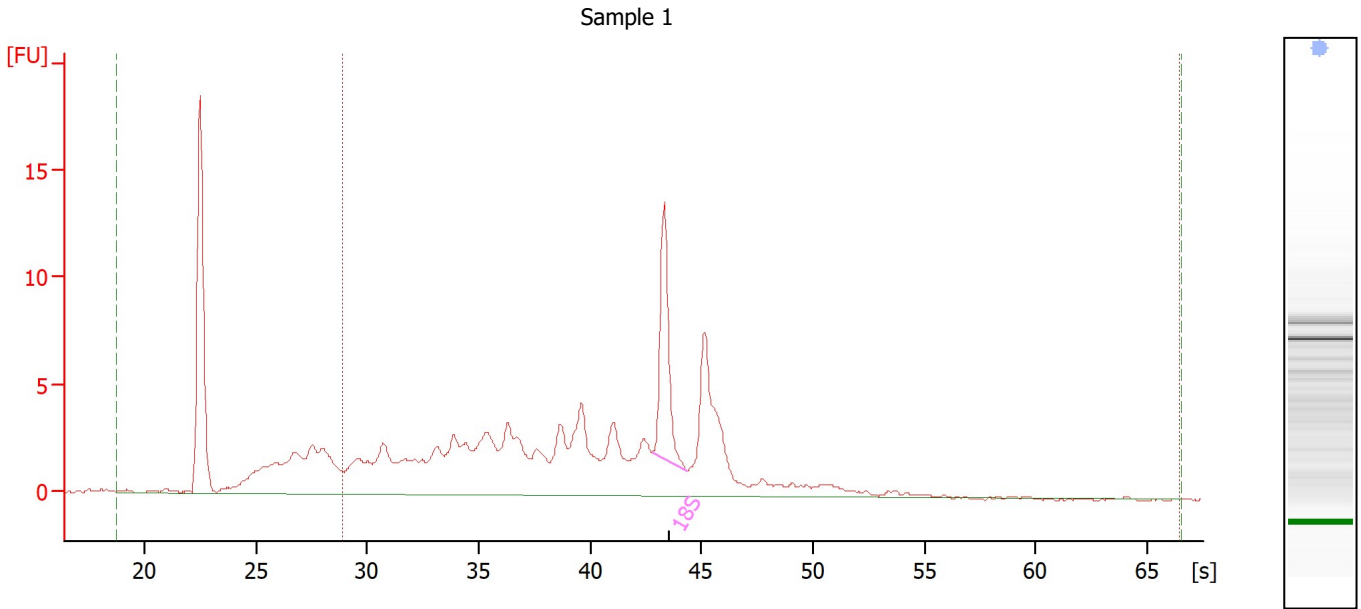
**Ladder**

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

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary**



**Overall Results for sample 1 : Sample 1**

RNA Area:	147.9	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	110 ng/μl	Result Flagging Label:	RIN: 5.40
rRNA Ratio [28s / 18s]:	0.0	Corr. Area 1:	121.7
RNA Integrity Number (RIN):	5.4 (B.02.10)		

**Fragment table for sample 1 : Sample 1**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	42.78	44.33	11.6	7.8

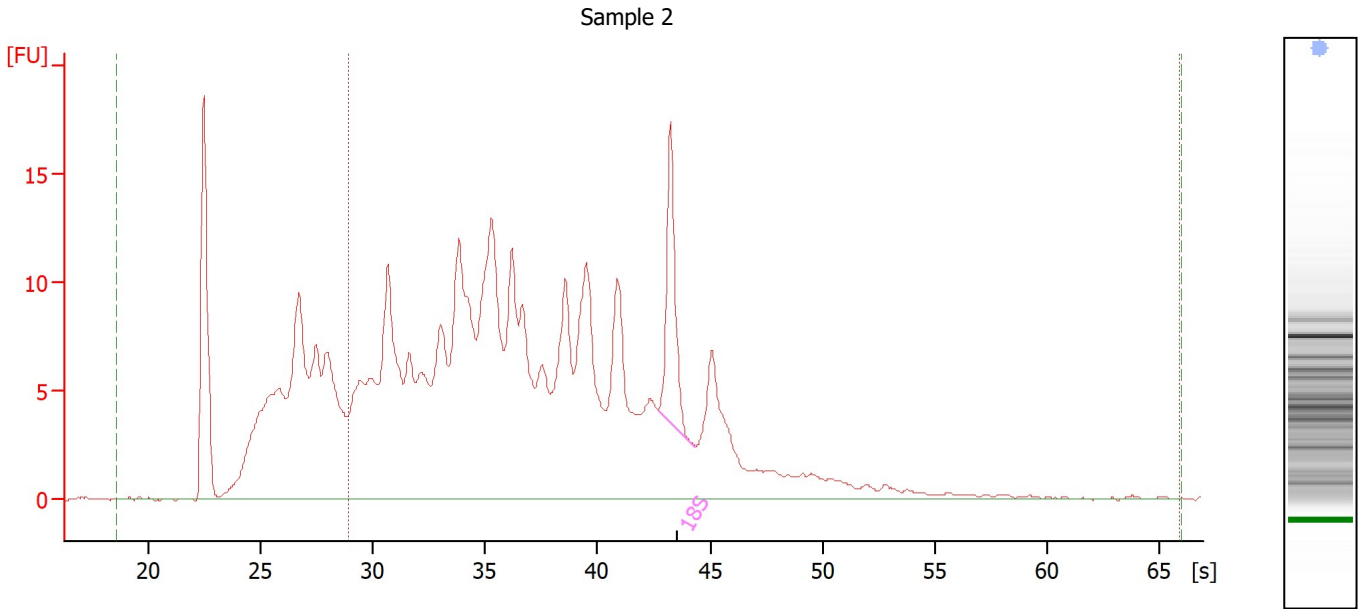
**Region table for sample 1 : Sample 1**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	66.44	121.7	82	<span style="background-color: #800000; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : Sample 2**

RNA Area:	419.1	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	312 ng/μl	Result Flagging Label:	RIN: 4.20
rRNA Ratio [28s / 18s]:	0.0	Corr. Area 1:	327.1
RNA Integrity Number (RIN):	4.2 (B.02.10)		

**Fragment table for sample 2 : Sample 2**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	42.71	44.33	13.8	3.3

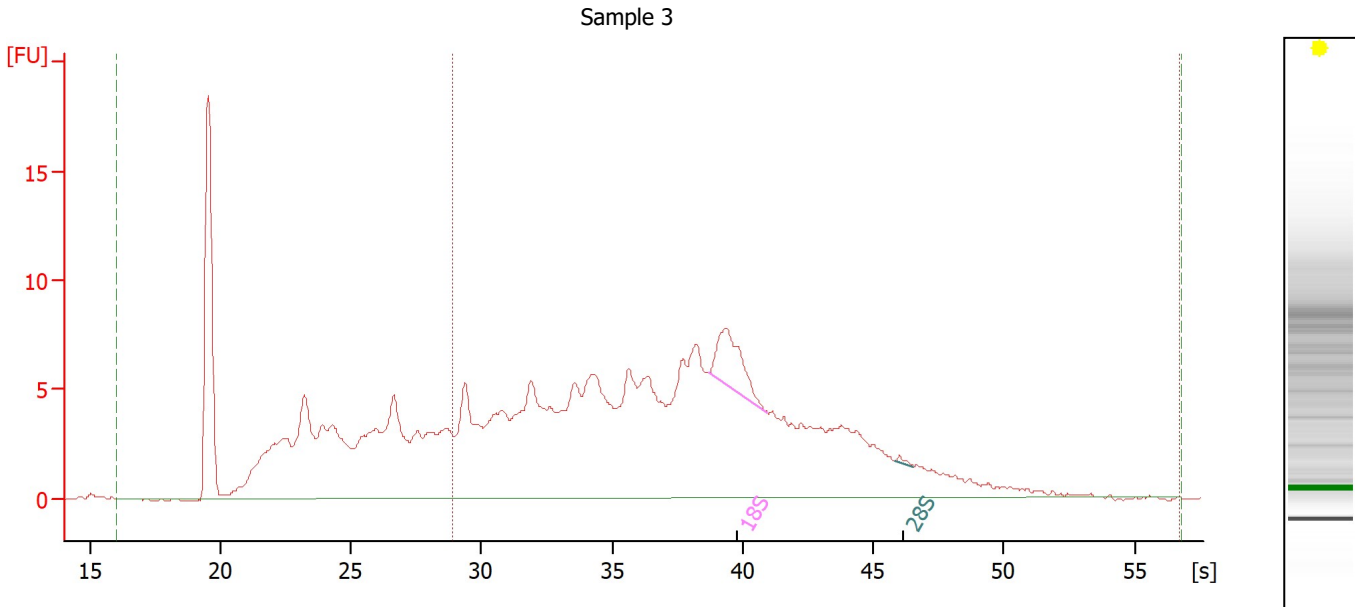
**Region table for sample 2 : Sample 2**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	65.88	327.1	78	<span style="background-color: #800000; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : Sample 3**

RNA Area:	315.7	Result Flagging Color:	<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	235 ng/μl	Result Flagging Label:	RIN: 2.80 ; DV200 50-70%
rRNA Ratio [28s / 18s]:	0.0	Corr. Area 1:	213.2
RNA Integrity Number (RIN):	2.8 (B.02.10)		

**Fragment table for sample 3 : Sample 3**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	38.71	40.93	7.3	2.3
28S	45.82	46.52	0.2	0.1

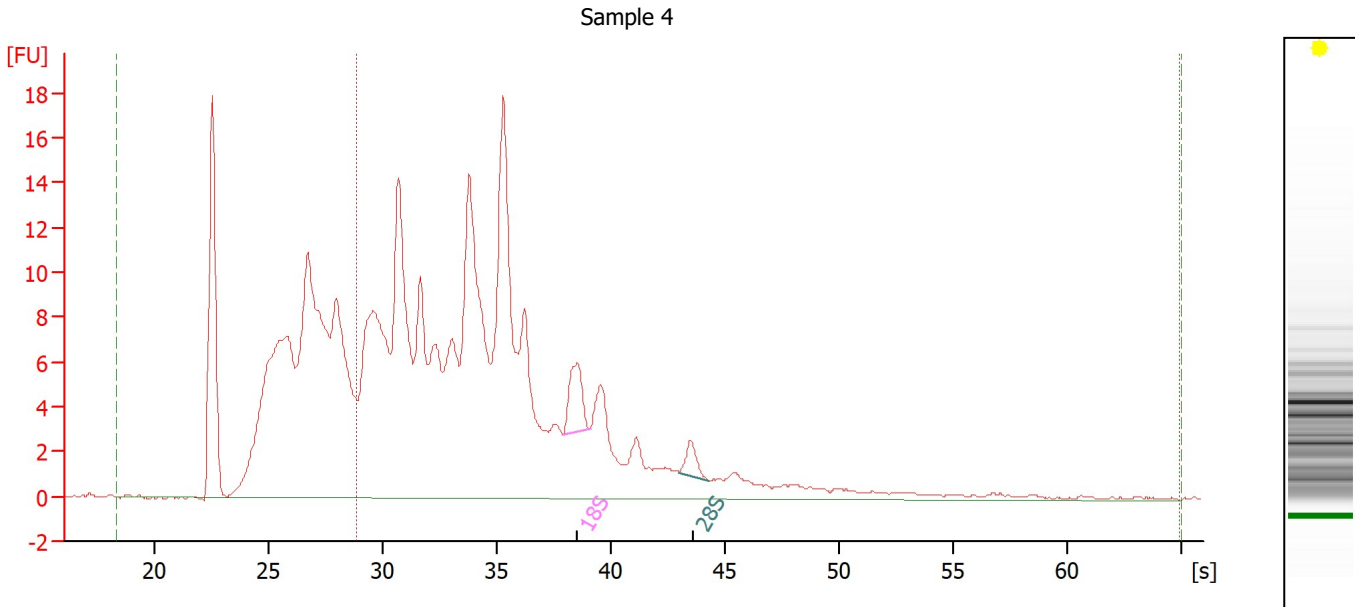
**Region table for sample 3 : Sample 3**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	56.72	213.2	67	<span style="background-color: darkred; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Sample 4**

RNA Area:	378.5	Result Flagging Color:	<span style="background-color: yellow; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	282 ng/μl	Result Flagging Label:	RIN: 2.70 ; DV200 50-70%
rRNA Ratio [28s / 18s]:	0.4		
RNA Integrity Number (RIN):	2.7 (B.02.10, Anomaly Threshold(s) manually adapted)	Corr. Area 1:	258.1

**Fragment table for sample 4 : Sample 4**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	37.89	39.07	5.1	1.4
28S	42.98	44.29	1.9	0.5

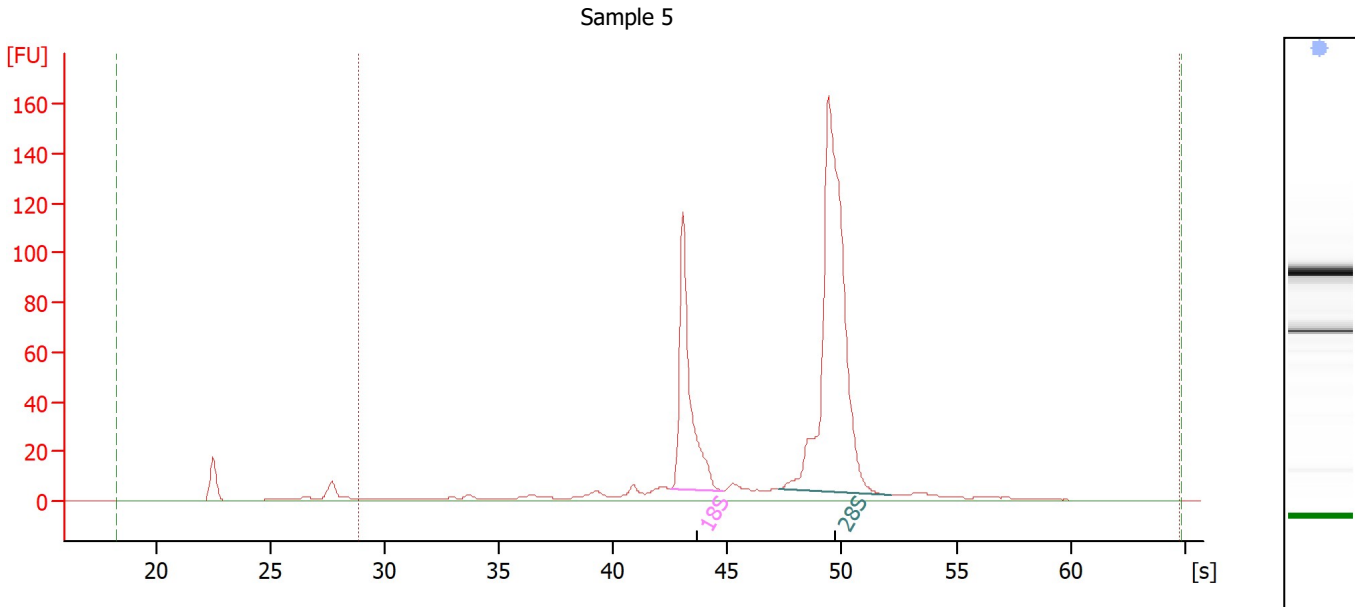
**Region table for sample 4 : Sample 4**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	64.91	258.1	68	<span style="background-color: red; border: 1px solid black; display: inline-block; width: 15px; height: 15px;"></span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Sample 5**

RNA Area:	671.0	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	500 ng/μl	Result Flagging Label:	RIN:10
rRNA Ratio [28s / 18s]:	2.5	Corr. Area 1:	644.5
RNA Integrity Number (RIN):	10 (B.02.10)		

**Fragment table for sample 5 : Sample 5**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	42.51	44.81	137.8	20.5
28S	47.25	52.14	339.6	50.6

**Region table for sample 5 : Sample 5**

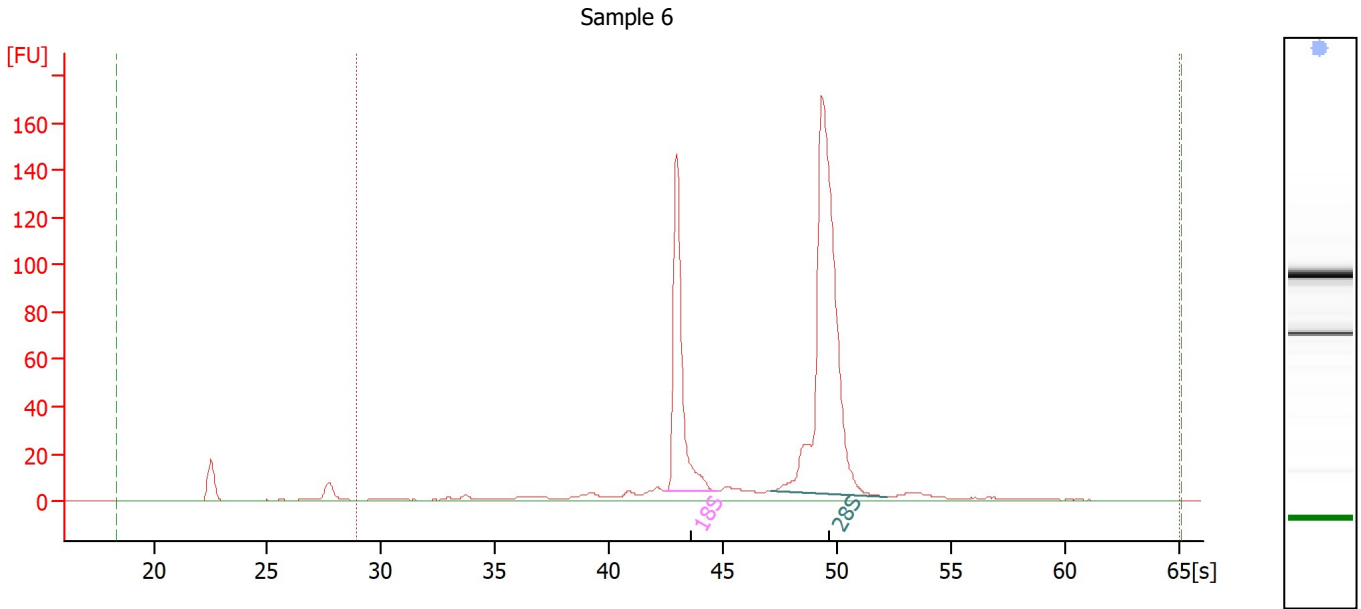
Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	64.78	644.5	96	<span style="background-color: #8B0000; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>



Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Sample 6**

RNA Area:	631.6	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	470 ng/μl	Result Flagging Label:	RIN:10
rRNA Ratio [28s / 18s]:	2.3	Corr. Area 1:	610.5
RNA Integrity Number (RIN):	10 (B.02.10)		

**Fragment table for sample 6 : Sample 6**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	42.45	44.76	138.1	21.9
28S	47.08	52.22	322.3	51.0

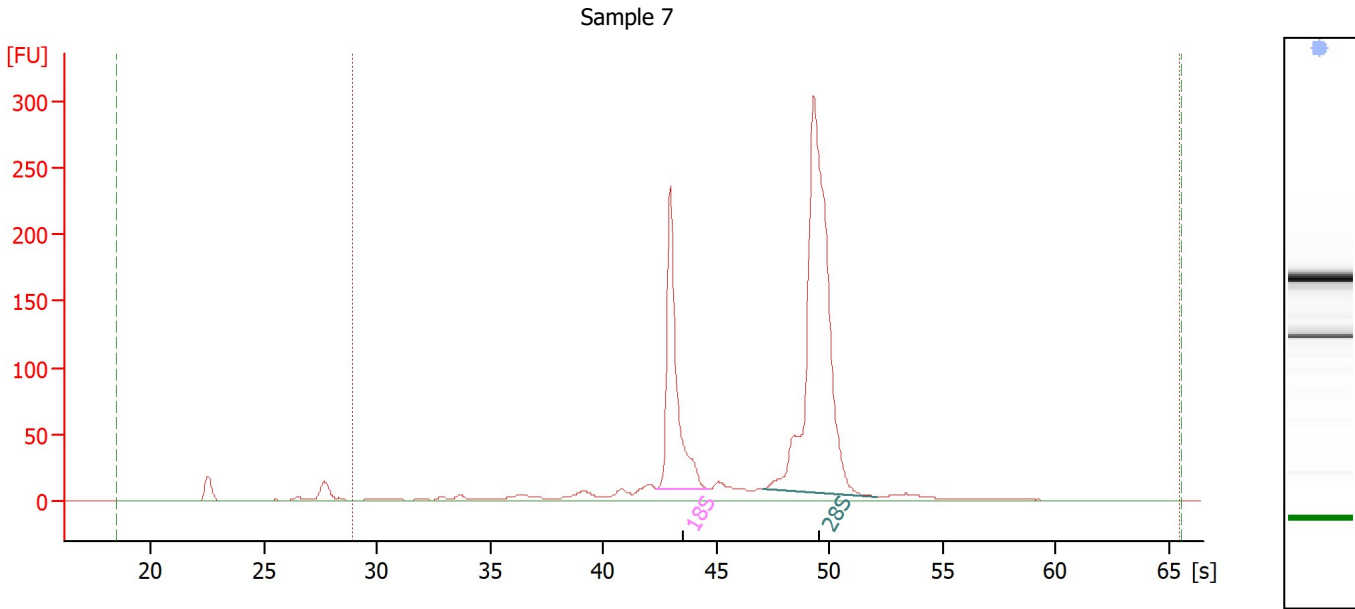
**Region table for sample 6 : Sample 6**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	65.05	610.5	97	<span style="background-color: #800000; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Sample 7**

RNA Area:	1,250.1	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	931 ng/μl	Result Flagging Label:	RIN:10
rRNA Ratio [28s / 18s]:	2.4	Corr. Area 1:	1,208.2
RNA Integrity Number (RIN):	10 (B.02.10, Anomaly Threshold(s) manually adapted)		

**Fragment table for sample 7 : Sample 7**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	42.34	44.67	264.0	21.1
28S	47.09	52.07	633.6	50.7

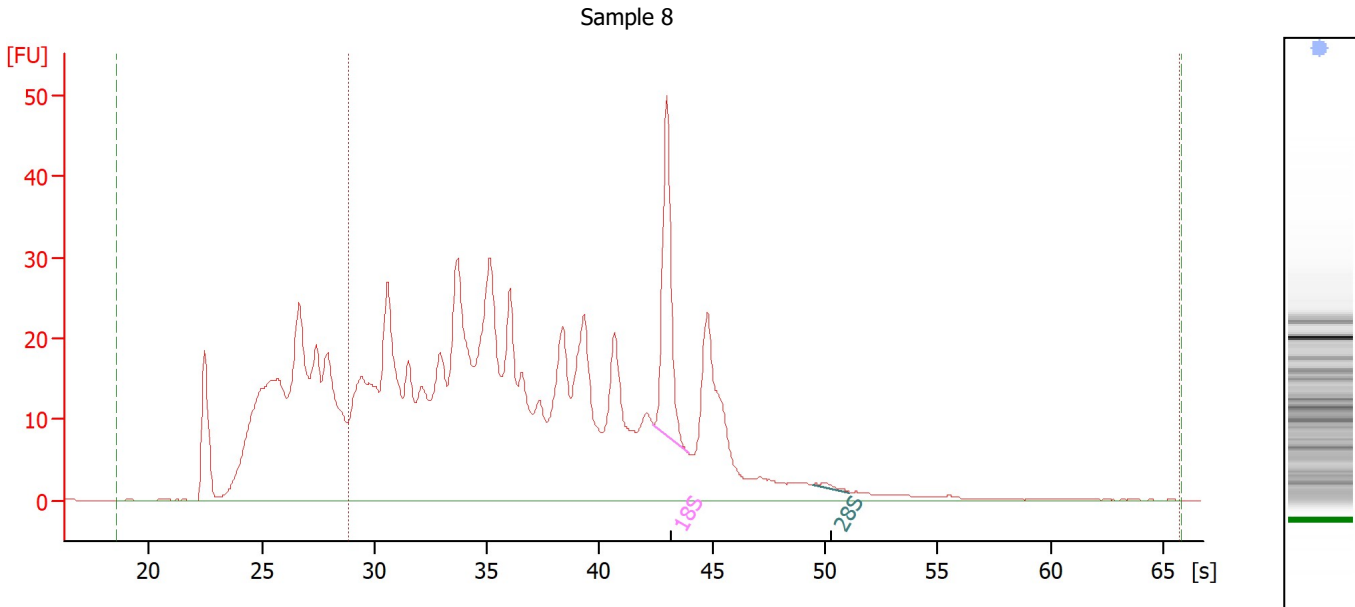
**Region table for sample 7 : Sample 7**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	65.46	1,208.2	97	<span style="background-color: #8B0000; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Sample 8**

RNA Area:	1,020.4	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	760 ng/μl	Result Flagging Label:	RIN:4
rRNA Ratio [28s / 18s]:	0.0	Corr. Area 1:	755.9
RNA Integrity Number (RIN):	4 (B.02.10, Anomaly Threshold(s) manually adapted)		

**Fragment table for sample 8 : Sample 8**

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	42.38	43.95	42.1	4.1
28S	49.43	51.10	1.0	0.1

**Region table for sample 8 : Sample 8**

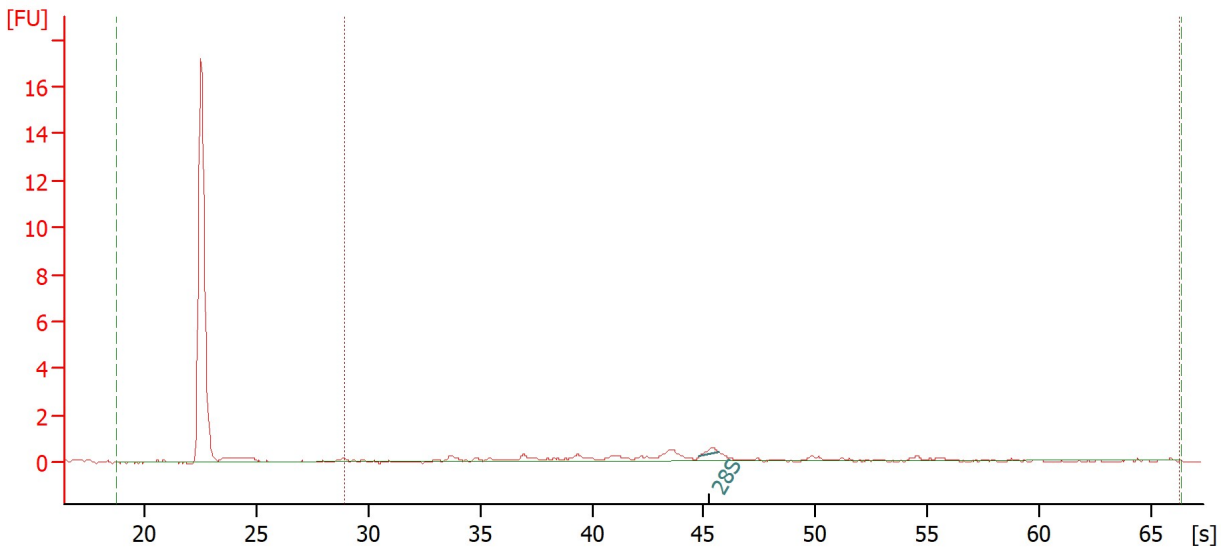
Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	65.74	755.9	74	<span style="background-color: #8B0000; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**

Sample 9



**Overall Results for sample 9 : Sample 9**

RNA Area:	9.3	Result Flagging Color:	<span style="background-color: green; color: black;"> </span>
RNA Concentration:	7 ng/μl	Result Flagging Label:	RIN N/A ; DV200 > 70%
rRNA Ratio [28s / 18s]:	0.0		
RNA Integrity Number (RIN):	N/A (B.02.10)	Corr. Area 1:	7.4

**Fragment table for sample 9 : Sample 9**

Name	Start Time [s]	End Time [s]	Area	% of total Area
28S	44.81	45.72	0.3	3.0

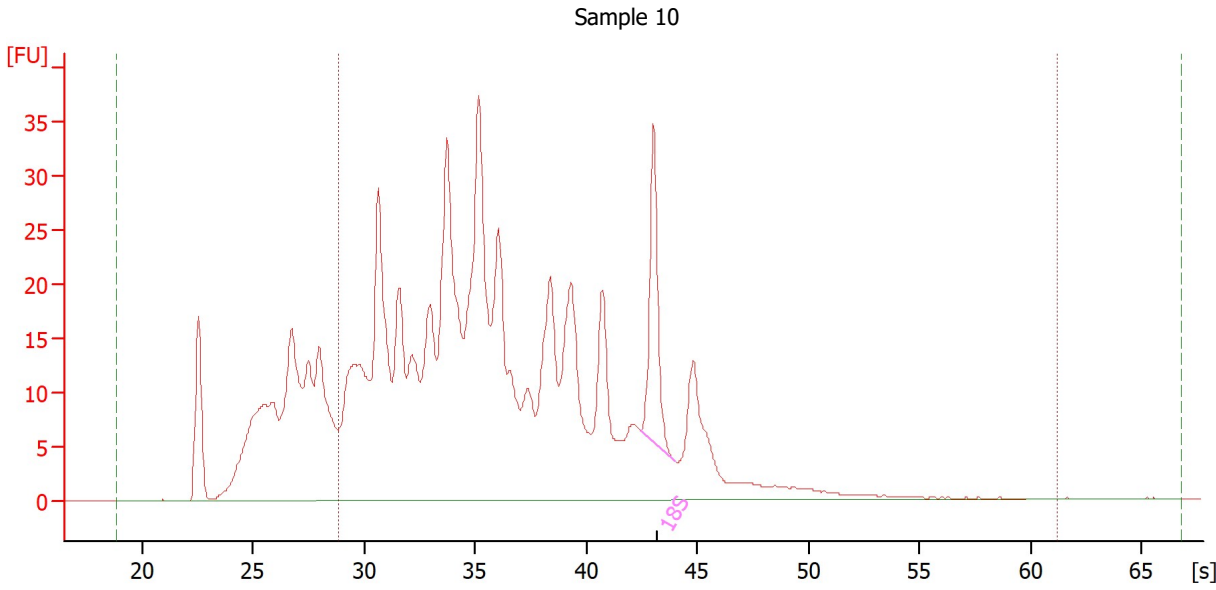
**Region table for sample 9 : Sample 9**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	66.30	7.4	80	<span style="background-color: red; color: black;"> </span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	818.9	Result Flagging Color:	<span style="background-color: green; color: black;">          </span>
RNA Concentration:	610 ng/μl	Result Flagging Label:	RIN: 3.80 ; DV200 > 70%
rRNA Ratio [28s / 18s]:	0.0		
RNA Integrity Number (RIN):	3.8 (B.02.10)	Corr. Area 1:	651.8

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

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	42.48	43.98	29.1	3.6

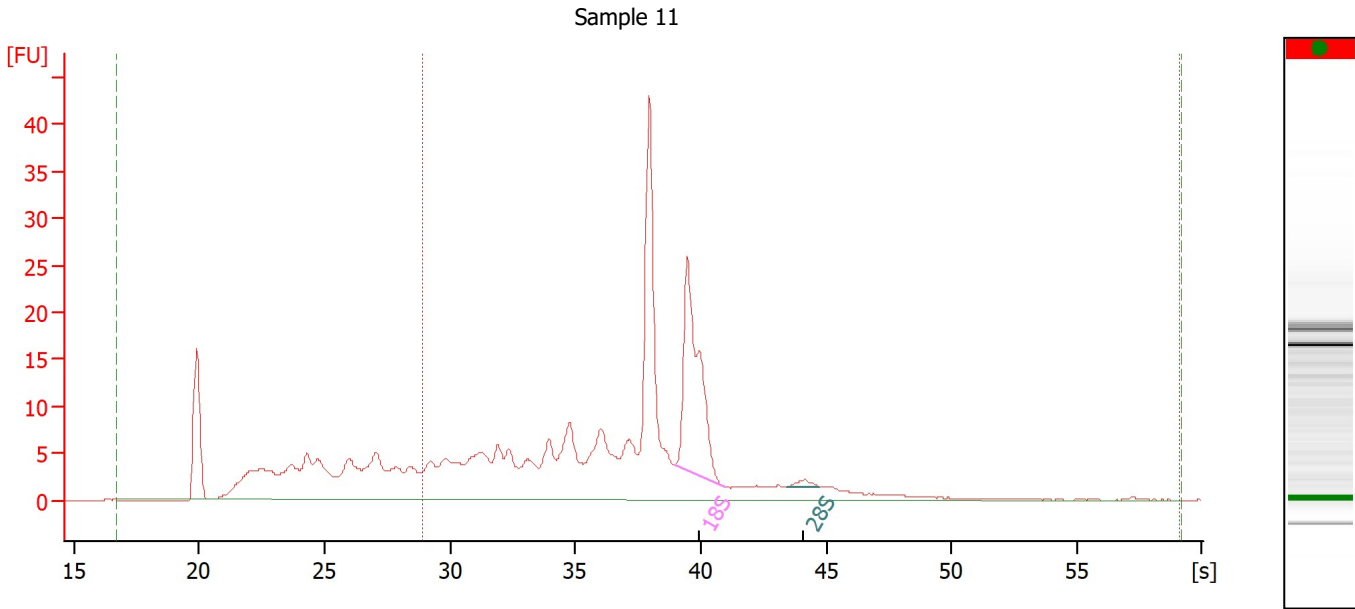
**Region table for sample 10 : Sample 10**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	61.24	651.8	80	<span style="background-color: black; color: black;">          </span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	353.3	Result Flagging Color:	<span style="background-color: green; color: black;">████████</span>
RNA Concentration:	263 ng/μl	Result Flagging Label:	RIN N/A ; DV200 > 70%
rRNA Ratio [28s / 18s]:	0.0	Corr. Area 1:	252.7
RNA Integrity Number (RIN):	N/A (B.02.10)		

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

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	38.96	40.93	39.9	11.3
28S	43.46	44.70	1.0	0.3

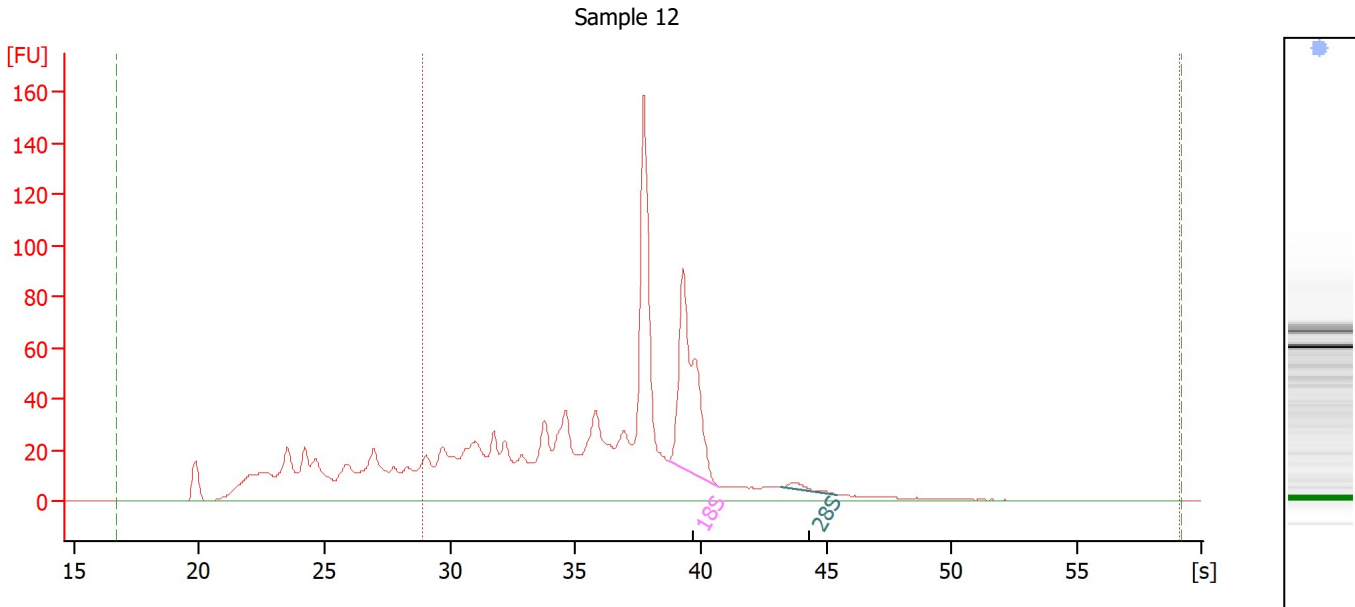
**Region table for sample 11 : Sample 11**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	59.10	252.7	71	<span style="background-color: red; color: black;">████████</span>

Assay Class: Eukaryote Total RNA Nano  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
 Modified: 11/19/2019 1:55:34 PM

**Electropherogram Summary Continued ...**



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

RNA Area:	1,332.4	Result Flagging Color:	<span style="background-color: #ADD8E6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	992 ng/μl	Result Flagging Label:	RIN:5
rRNA Ratio [28s / 18s]:	0.0	Corr. Area 1:	1,010.3
RNA Integrity Number (RIN):	5 (B.02.10)		

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

Name	Start Time [s]	End Time [s]	Area	% of total Area
18S	38.70	40.71	141.6	10.6
28S	43.20	45.43	5.4	0.4

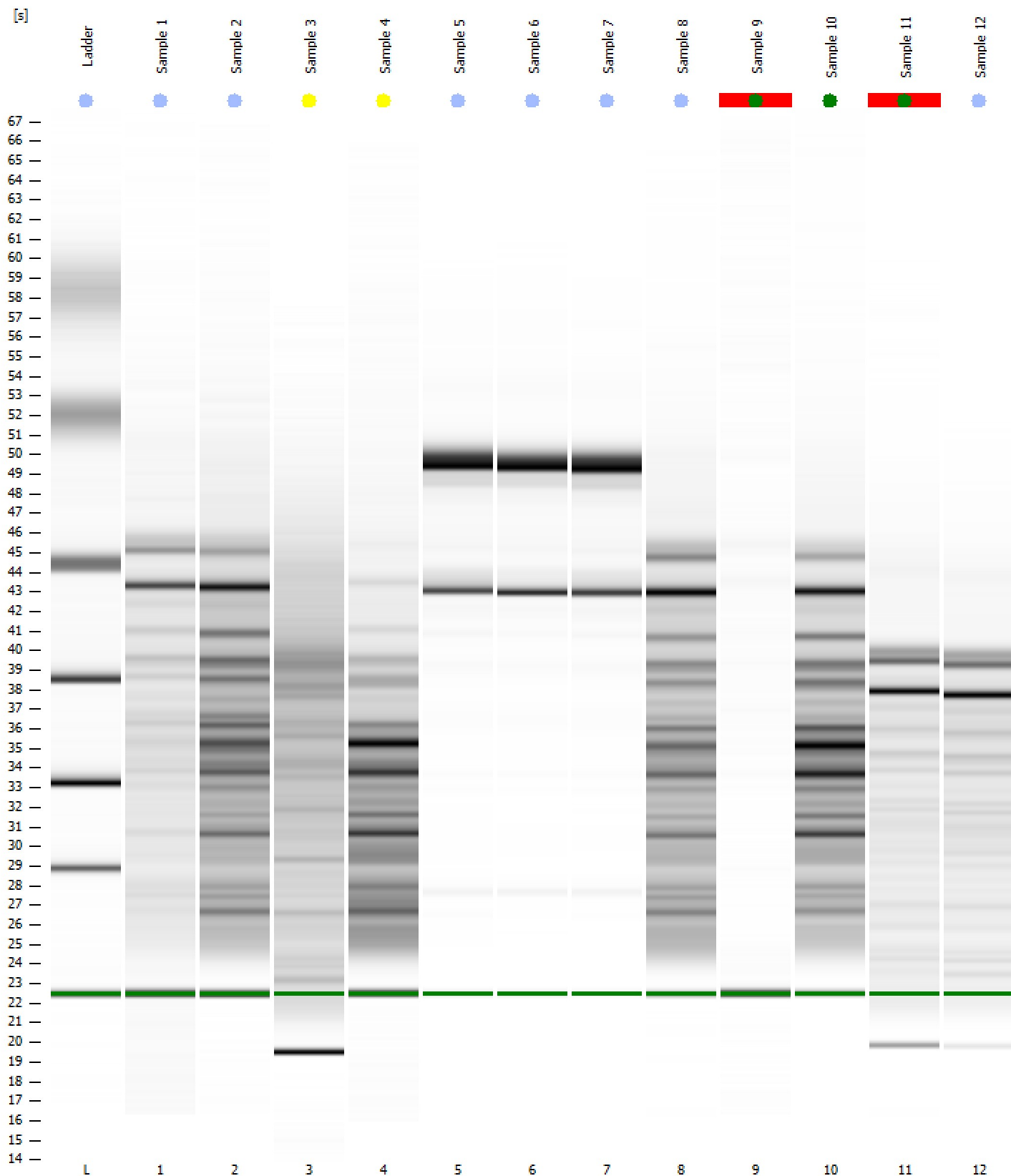
**Region table for sample 12 : Sample 12**

Name	From [s]	To [s]	Corr. Area	% of Total	Color
DV200	28.89	59.10	1,010.3	76	<span style="background-color: #8B0000; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span>

Assay Class: Eukaryote Total RNA Nano  
Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
Modified: 11/19/2019 1:55:34 PM

Gel Image



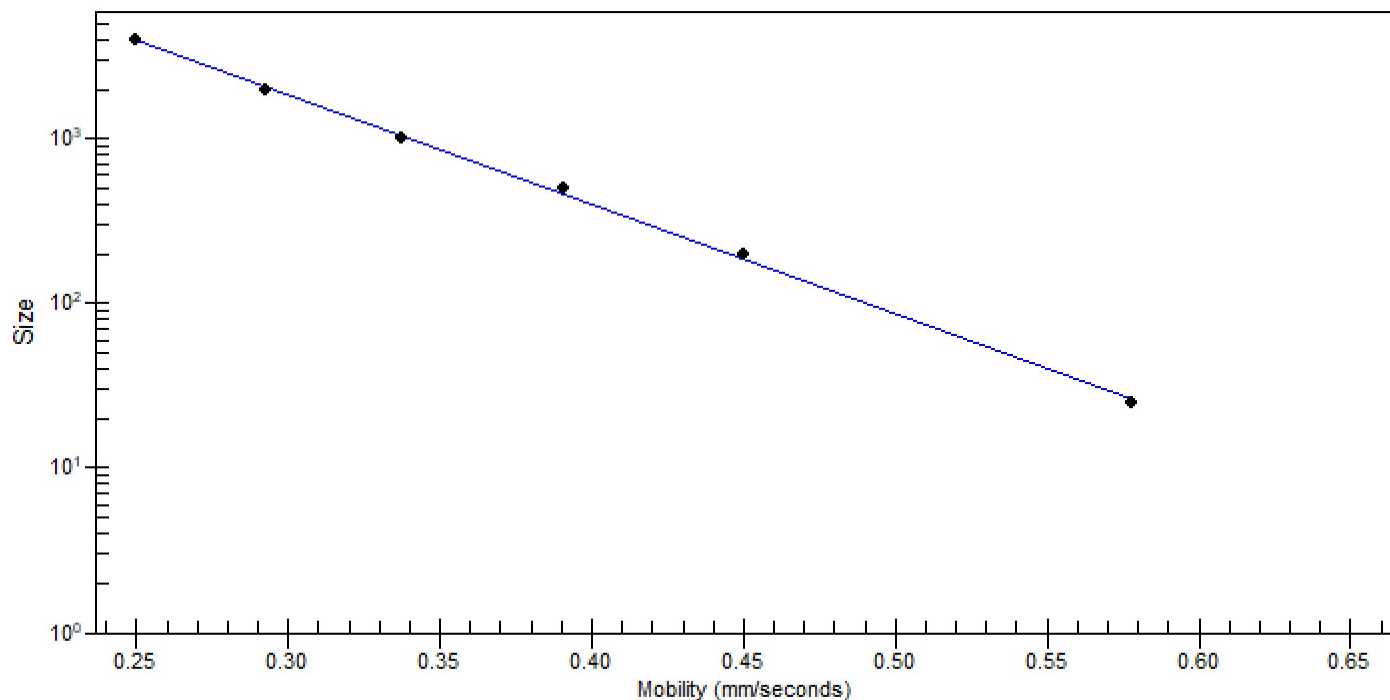


Assay Class: Eukaryote Total RNA Nano  
Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad

Created: 11/19/2019 1:31:44 PM  
Modified: 11/19/2019 1:55:34 PM

**Curves**

**Standard Curve**



Assay Class: Eukaryote Total RNA Nano Created: 11/19/2019 1:31:44 PM  
 Data Path: Z:\...19\Bioanalyzer1\_Eukaryote Total RNA Nano\_2019-11-19\_001.xad Modified: 11/19/2019 1:55:34 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		11/19/2019 1:55:32 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2019-11-19\Bioanalyze r1_Eukaryote Total RNA Nano_2019-11-19_001.xad)		Instrument	Run		11/19/2019 1:31:49 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		11/19/2019 1:31:49 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		11/19/2019 1:31:49 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		11/19/2019 1:31:49 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		11/19/2019 1:31:49 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		11/19/2019 1:31:49 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		11/19/2019 1:31:49 PM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB