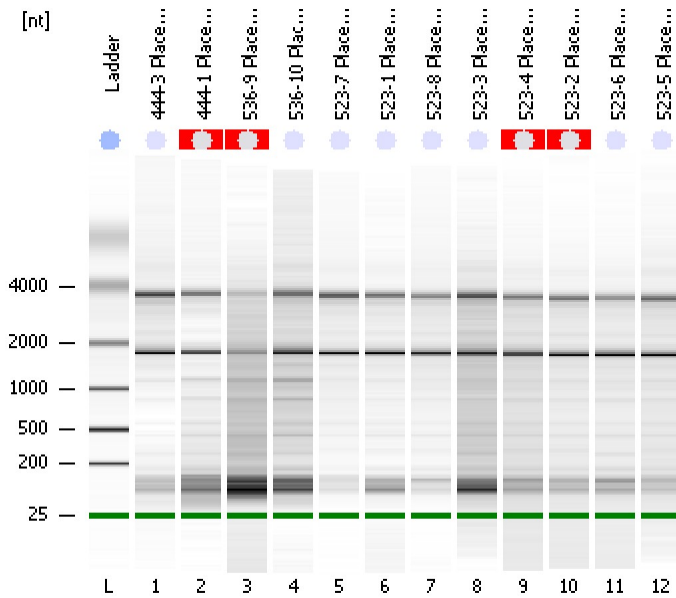


Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

Electrophoresis File Run Summary



Instrument Information:

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

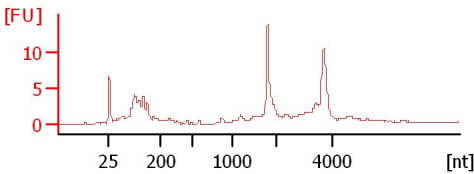
Assay Information:

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)  
© Copyright 2003 - 2009 Agilent Technologies, Inc.

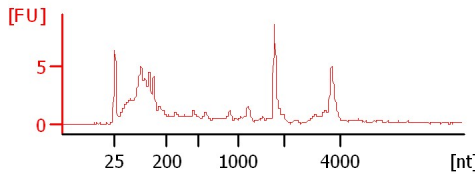
Chip Information:

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

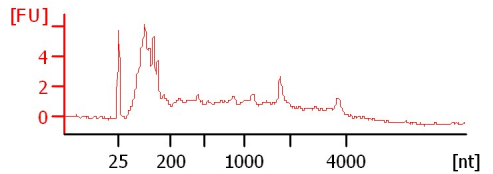
444-3 Placenta RNA  
RIN: 8.30



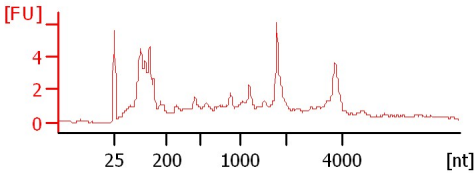
444-1 Placenta RNA  
RIN N/A



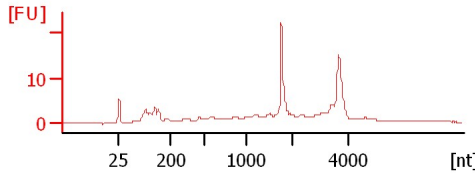
536-9 Placenta RNA  
RIN N/A



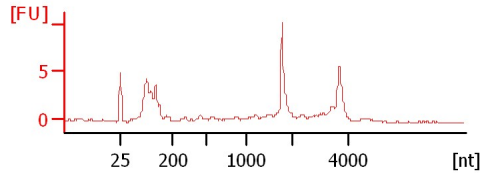
536-10 Placenta RNA  
RIN:6



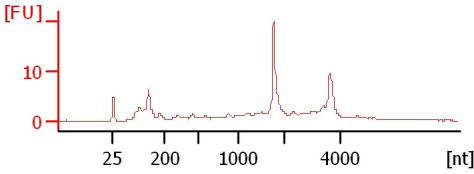
523-7 Placenta RNA  
RIN: 7.50



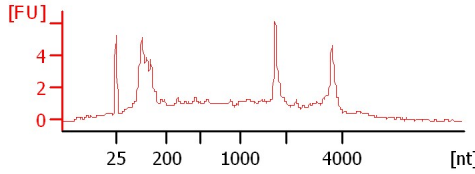
523-1 Placenta RNA  
RIN: 7.90



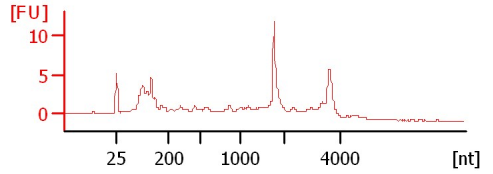
523-8 Placenta RNA  
RIN: 7.10



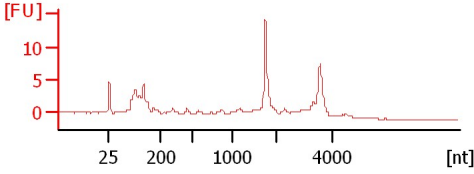
523-3 Placenta RNA  
RIN: 5.90



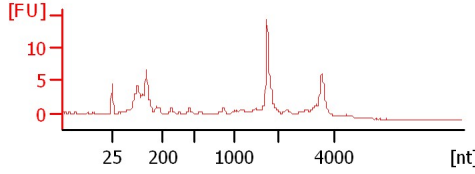
523-4 Placenta RNA  
RIN N/A



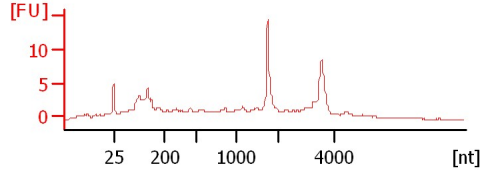
523-2 Placenta RNA  
RIN N/A



523-6 Placenta RNA  
RIN: 7.70



523-5 Placenta RNA  
RIN:7



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
444-3 Placenta RNA		✓	RIN: 8.30	
444-1 Placenta RNA		✓	RIN N/A	
536-9 Placenta RNA		✓	RIN N/A	
536-10 Placenta RNA		✓	RIN:6	
523-7 Placenta RNA		✓	RIN: 7.50	
523-1 Placenta RNA		✓	RIN: 7.90	
523-8 Placenta RNA		✓	RIN: 7.10	
523-3 Placenta RNA		✓	RIN: 5.90	
523-4 Placenta RNA		✓	RIN N/A	
523-2 Placenta RNA		✓	RIN N/A	
523-6 Placenta RNA		✓	RIN: 7.70	
523-5 Placenta RNA		✓	RIN:7	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 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

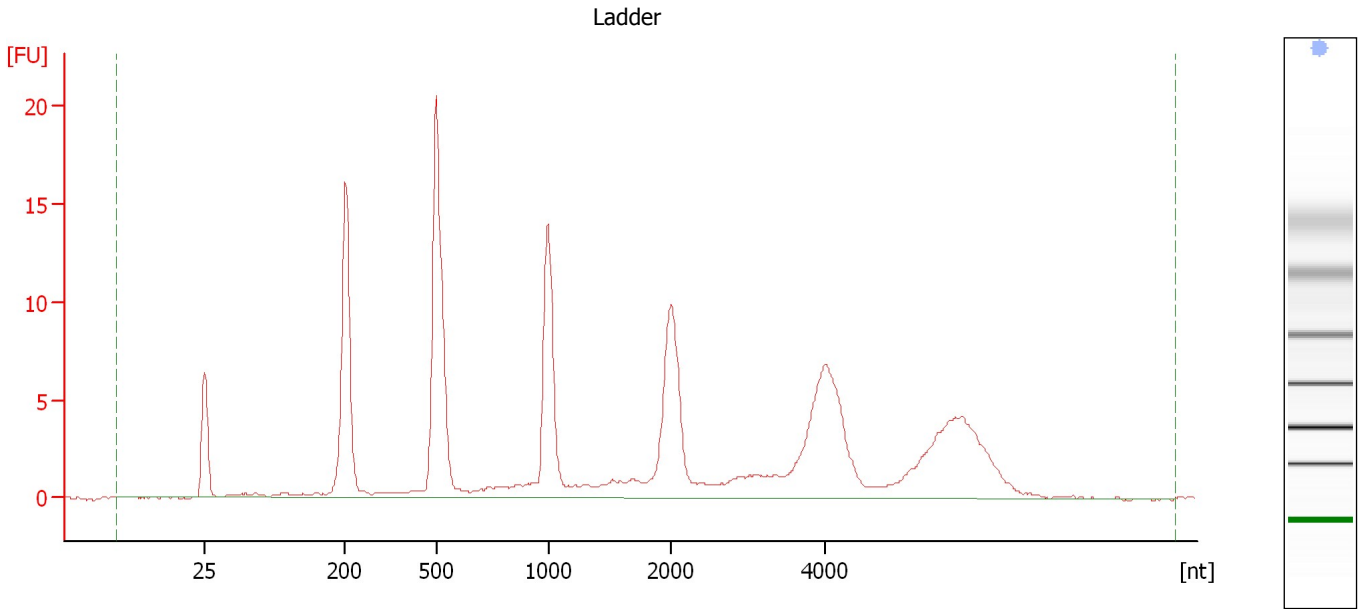
### Ladder

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

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary**



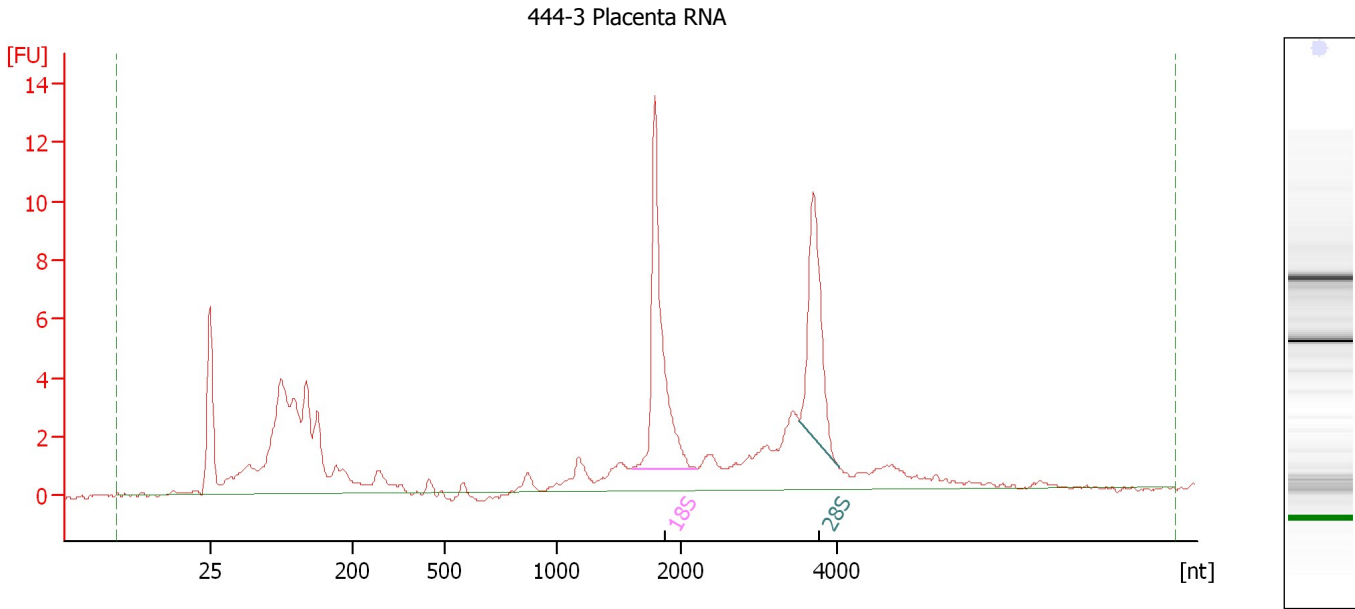
**Overall Results for Ladder**

RNA Area:	168.4	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:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : 444-3 Placenta RNA**

RNA Area: 102.6 RNA Integrity Number (RIN): 8.3 (B.02.08)  
RNA Concentration: 91 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.7 Result Flagging Label: RIN: 8.30

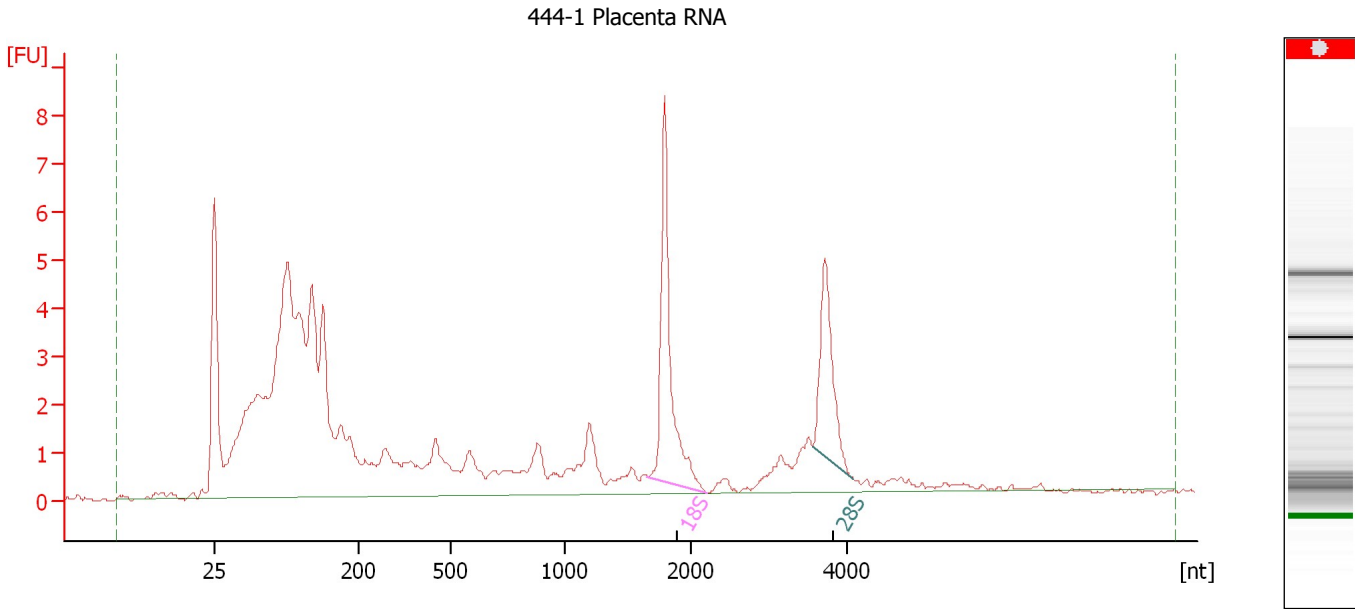
**Fragment table for sample 1 : 444-3 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,598	2,197	15.5	15.1
28S	3,516	4,011	10.9	10.7

Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
 Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 444-1 Placenta RNA**

RNA Area:	101.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	91 ng/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]:	0.6	Result Flagging Label:	RIN N/A

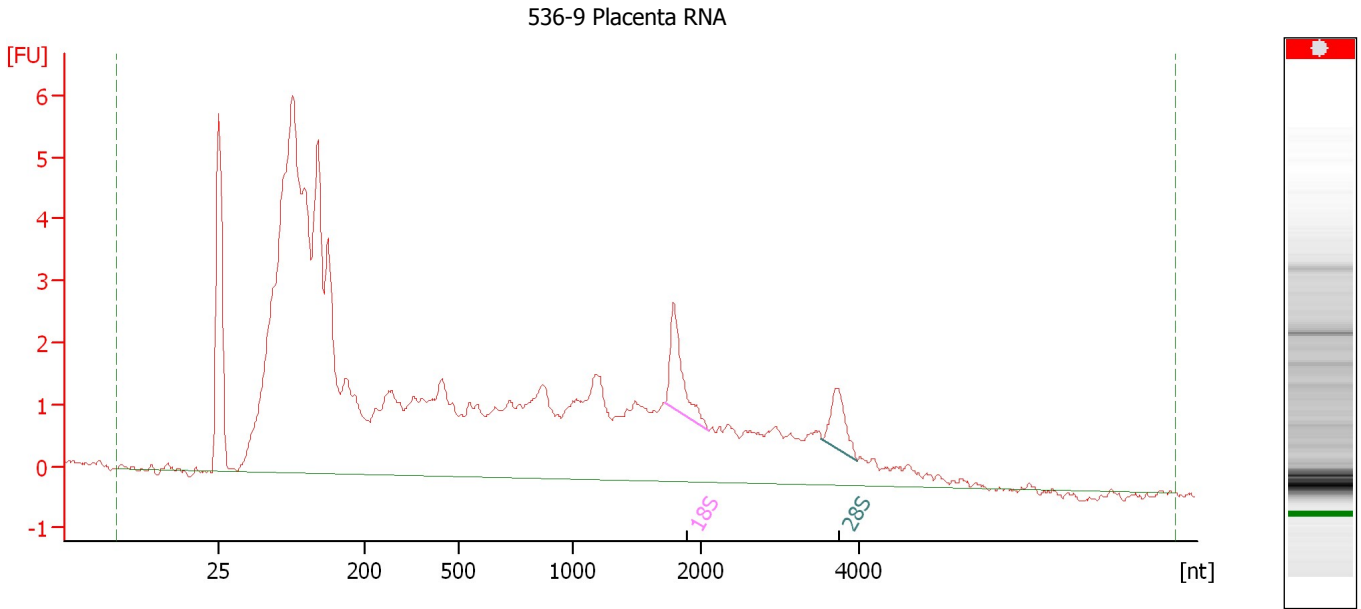
**Fragment table for sample 2 : 444-1 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,655	2,227	8.7	8.6
28S	3,562	4,080	5.2	5.1

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 536-9 Placenta RNA**

RNA Area: 121.9 RNA Integrity Number (RIN): N/A (B.02.08)  
RNA Concentration: 109 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.6 Result Flagging Label: RIN N/A

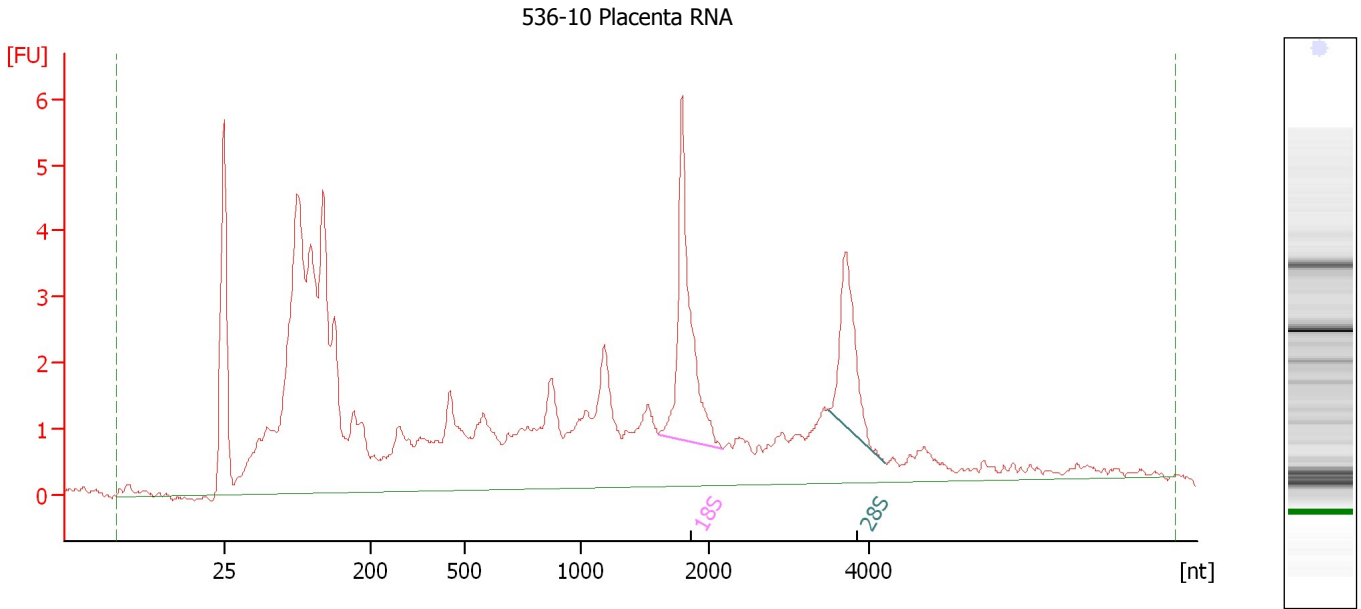
**Fragment table for sample 3 : 536-9 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,721	2,108	2.4	1.9
28S	3,524	3,983	1.4	1.2

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 536-10 Placenta RNA**

RNA Area: 102.2 RNA Integrity Number (RIN): 6 (B.02.08)  
RNA Concentration: 91 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.6 Result Flagging Label: RIN:6

**Fragment table for sample 4 : 536-10 Placenta RNA**

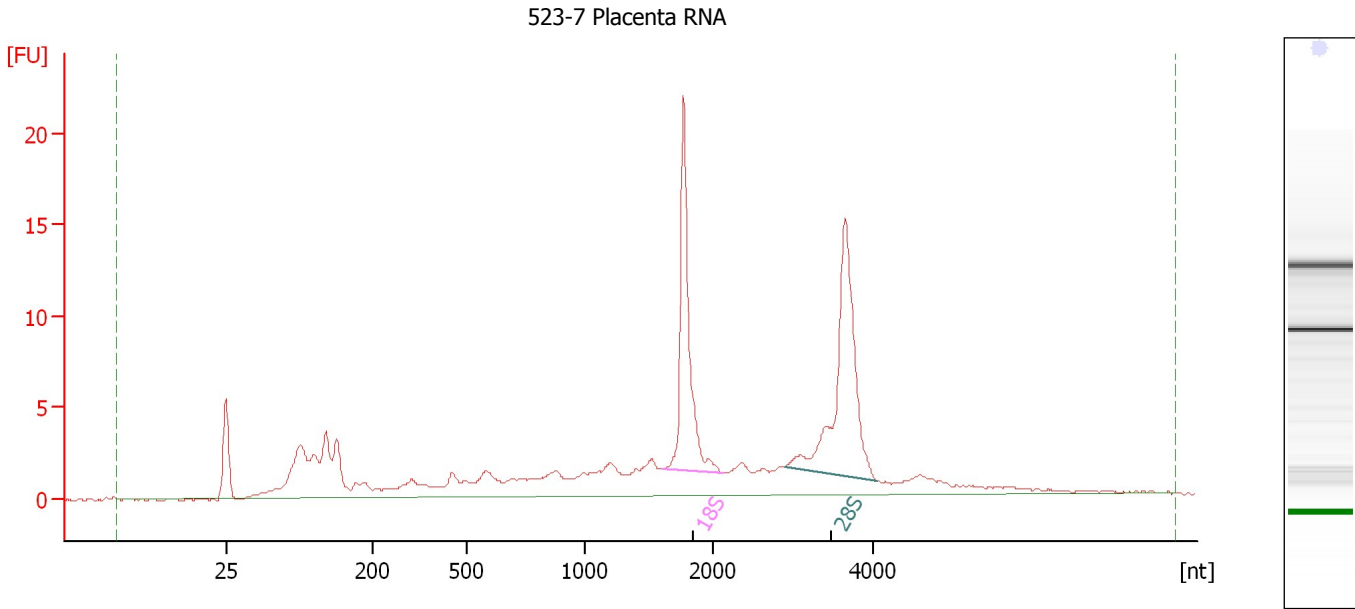
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,609	2,191	7.2	7.0
28S	3,502	4,211	4.1	4.0



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
 Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 523-7 Placenta RNA**

RNA Area:	140.9	RNA Integrity Number (RIN):	7.5 (B.02.08)
RNA Concentration:	126 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]:	1.2	Result Flagging Label:	RIN: 7.50

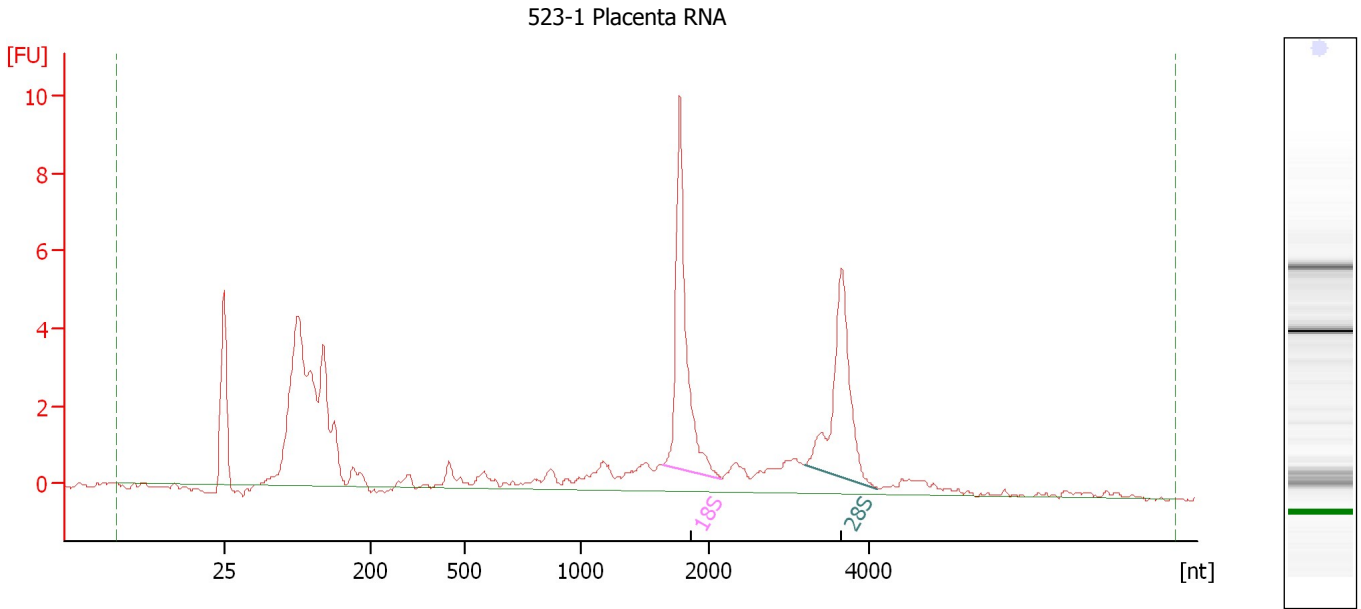
**Fragment table for sample 5 : 523-7 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,603	2,139	21.0	14.9
28S	2,912	4,045	25.9	18.4

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 523-1 Placenta RNA**

RNA Area:	69.6	RNA Integrity Number (RIN):	7.9 (B.02.08)
RNA Concentration:	62 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]:	0.8	Result Flagging Label:	RIN: 7.90

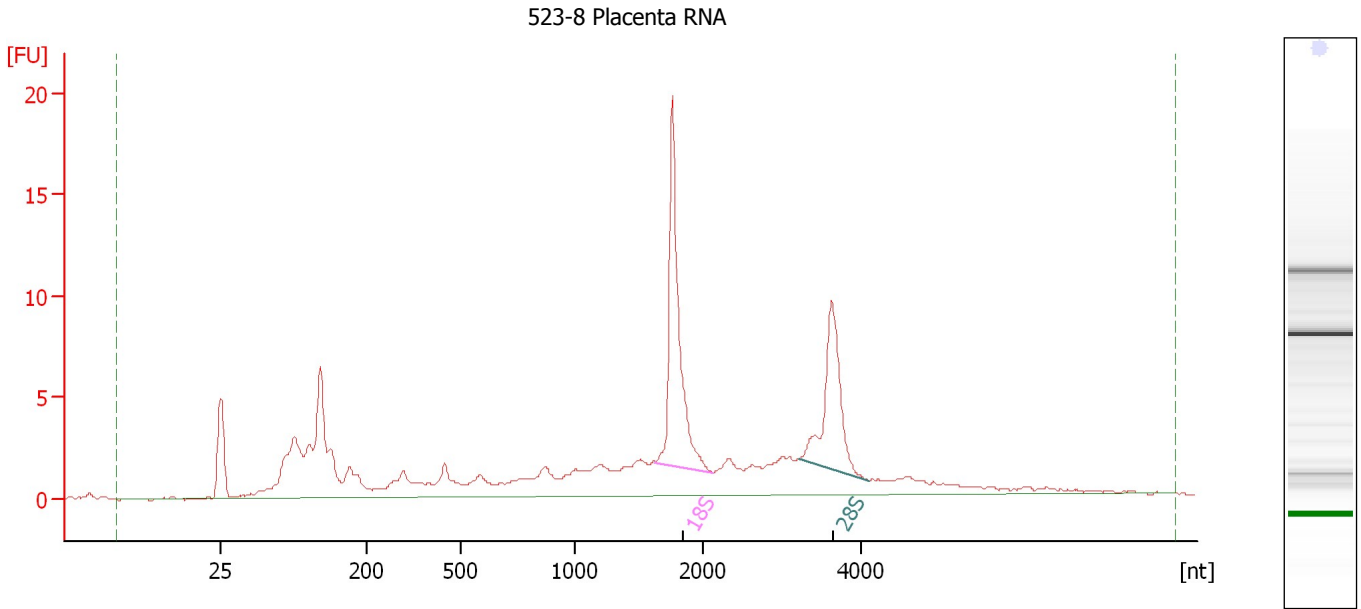
**Fragment table for sample 6 : 523-1 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,642	2,165	11.0	15.8
28S	3,195	4,118	9.1	13.0

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 523-8 Placenta RNA**

RNA Area: 137.4 RNA Integrity Number (RIN): 7.1 (B.02.08)  
RNA Concentration: 122 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.7 Result Flagging Label: RIN: 7.10

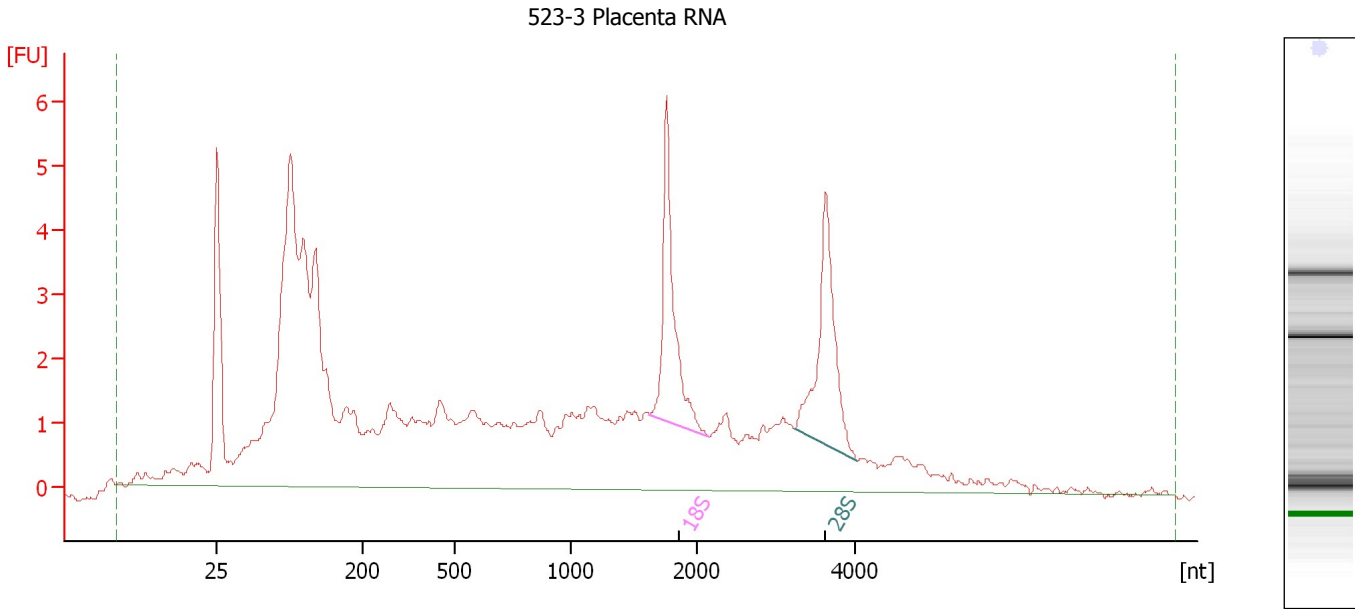
**Fragment table for sample 7 : 523-8 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,630	2,122	20.3	14.8
28S	3,226	4,087	13.3	9.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 523-3 Placenta RNA**

RNA Area: 117.8 RNA Integrity Number (RIN): 5.9 (B.02.08)  
RNA Concentration: 105 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.0 Result Flagging Label: RIN: 5.90

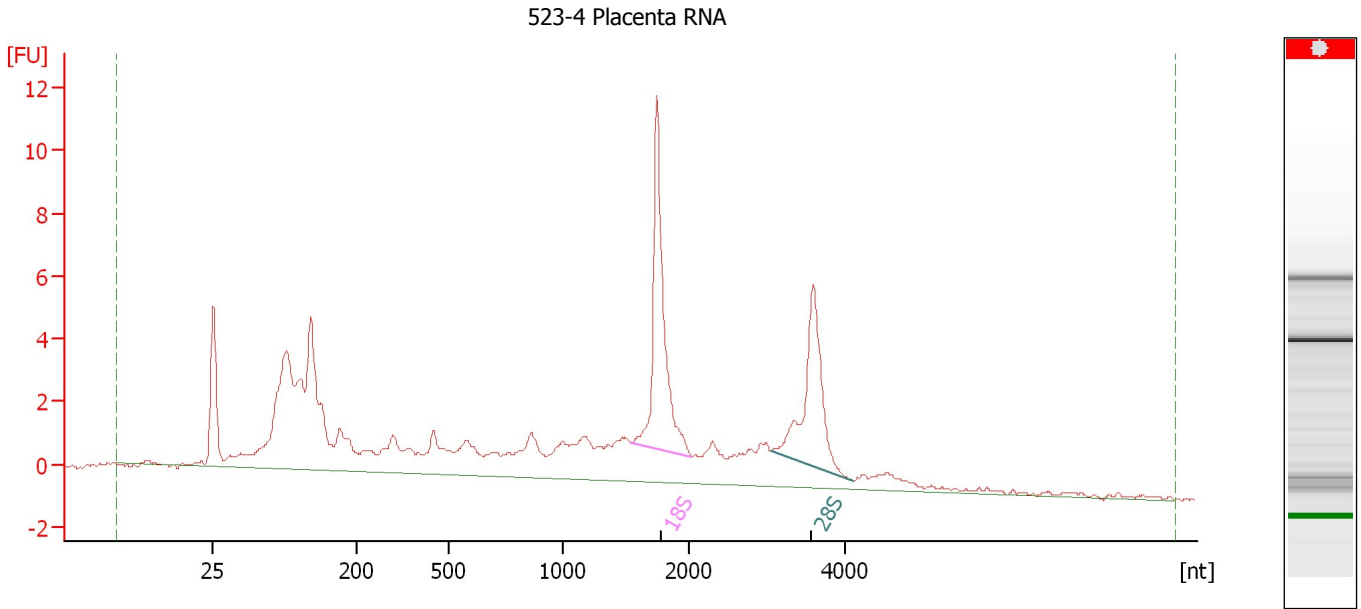
**Fragment table for sample 8 : 523-3 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,625	2,161	6.3	5.3
28S	3,244	4,030	6.5	5.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 523-4 Placenta RNA**

RNA Area:	116.1	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	103 ng/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]:	0.7	Result Flagging Label:	RIN N/A

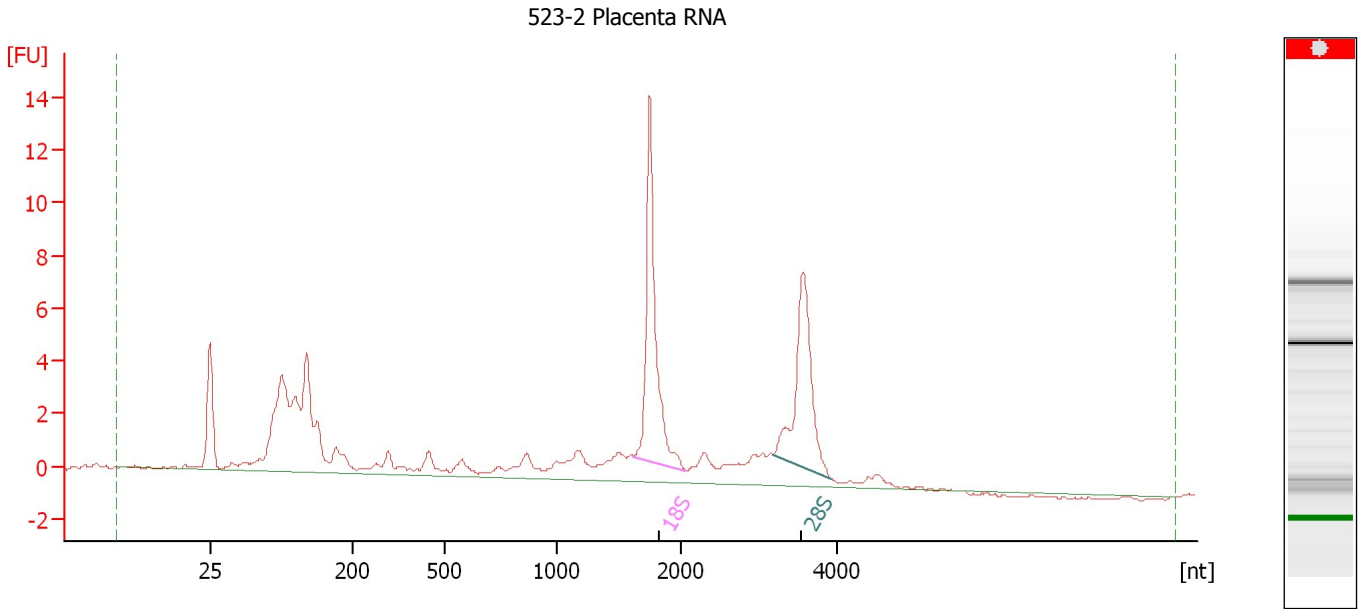
**Fragment table for sample 9 : 523-4 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,543	2,049	13.7	11.8
28S	3,059	4,097	10.1	8.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 523-2 Placenta RNA**

RNA Area:	89.9	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	80 ng/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

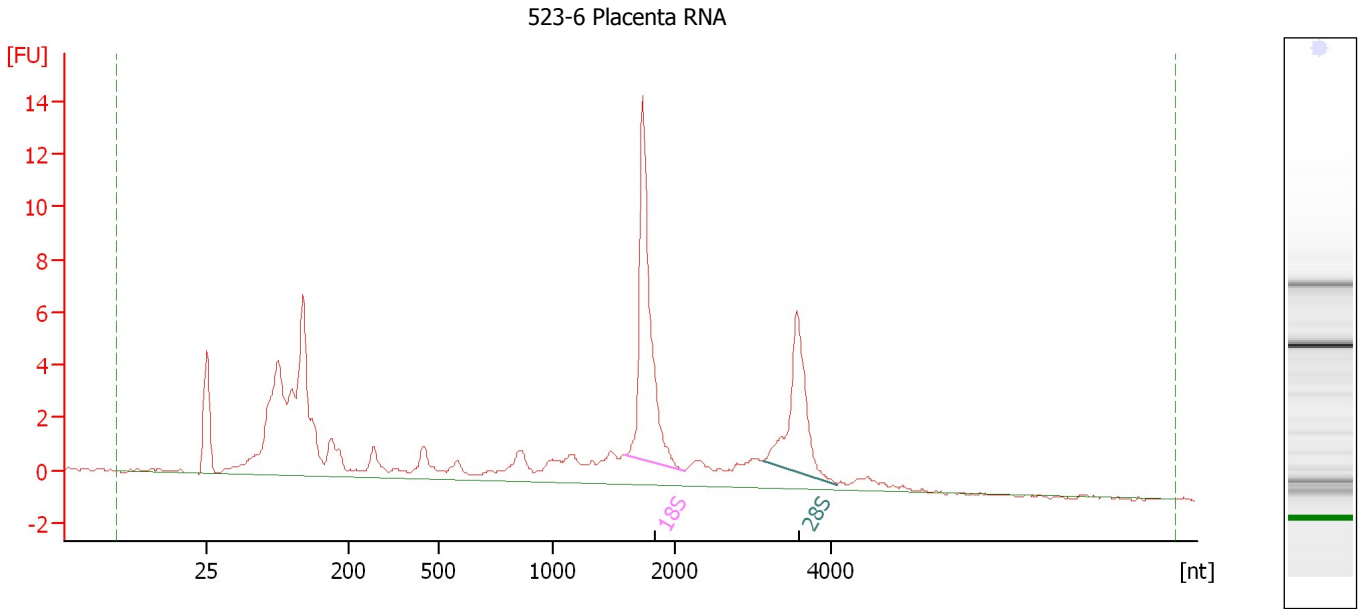
**Fragment table for sample 10 : 523-2 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,607	2,046	15.1	16.9
28S	3,173	3,915	12.1	13.5

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 523-6 Placenta RNA**

RNA Area: 106.2                      RNA Integrity Number (RIN): 7.7 (B.02.08)  
RNA Concentration: 95 ng/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.6              Result Flagging Label: RIN: 7.70

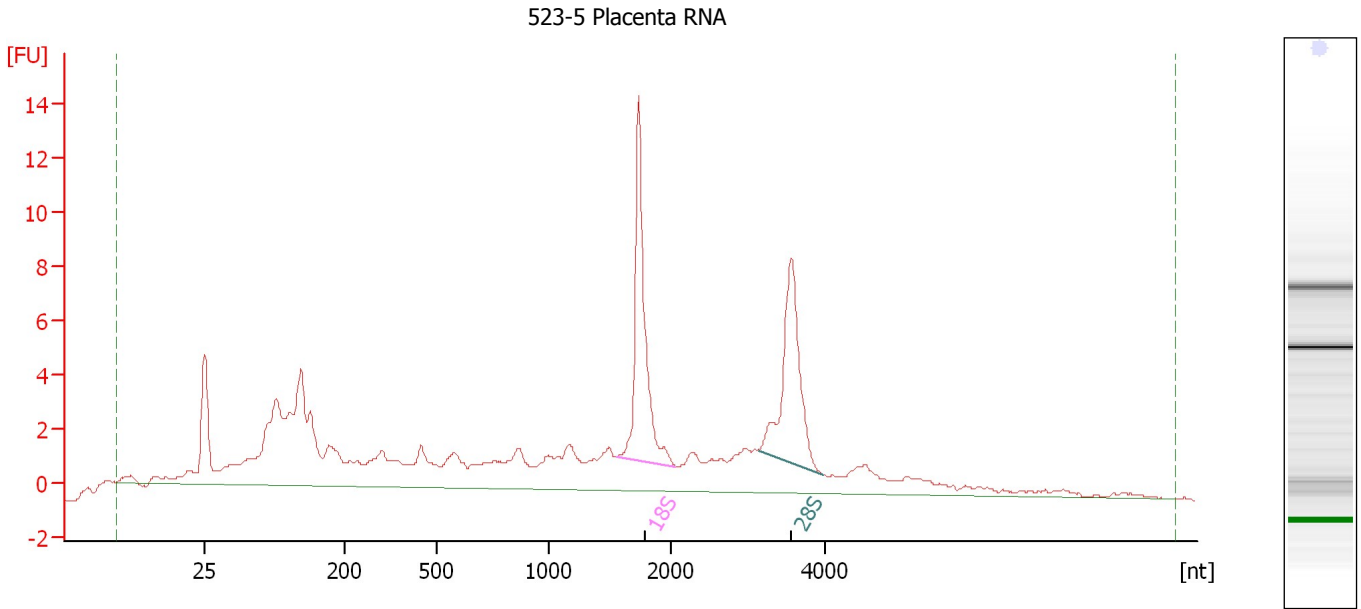
**Fragment table for sample 11 : 523-6 Placenta RNA**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,594	2,112	17.5	16.5
28S	3,122	4,090	10.3	9.7

Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 12 : 523-5 Placenta RNA**

RNA Area: 137.2 RNA Integrity Number (RIN): 7 (B.02.08)  
RNA Concentration: 122 ng/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.9 Result Flagging Label: RIN:7

**Fragment table for sample 12 : 523-5 Placenta RNA**

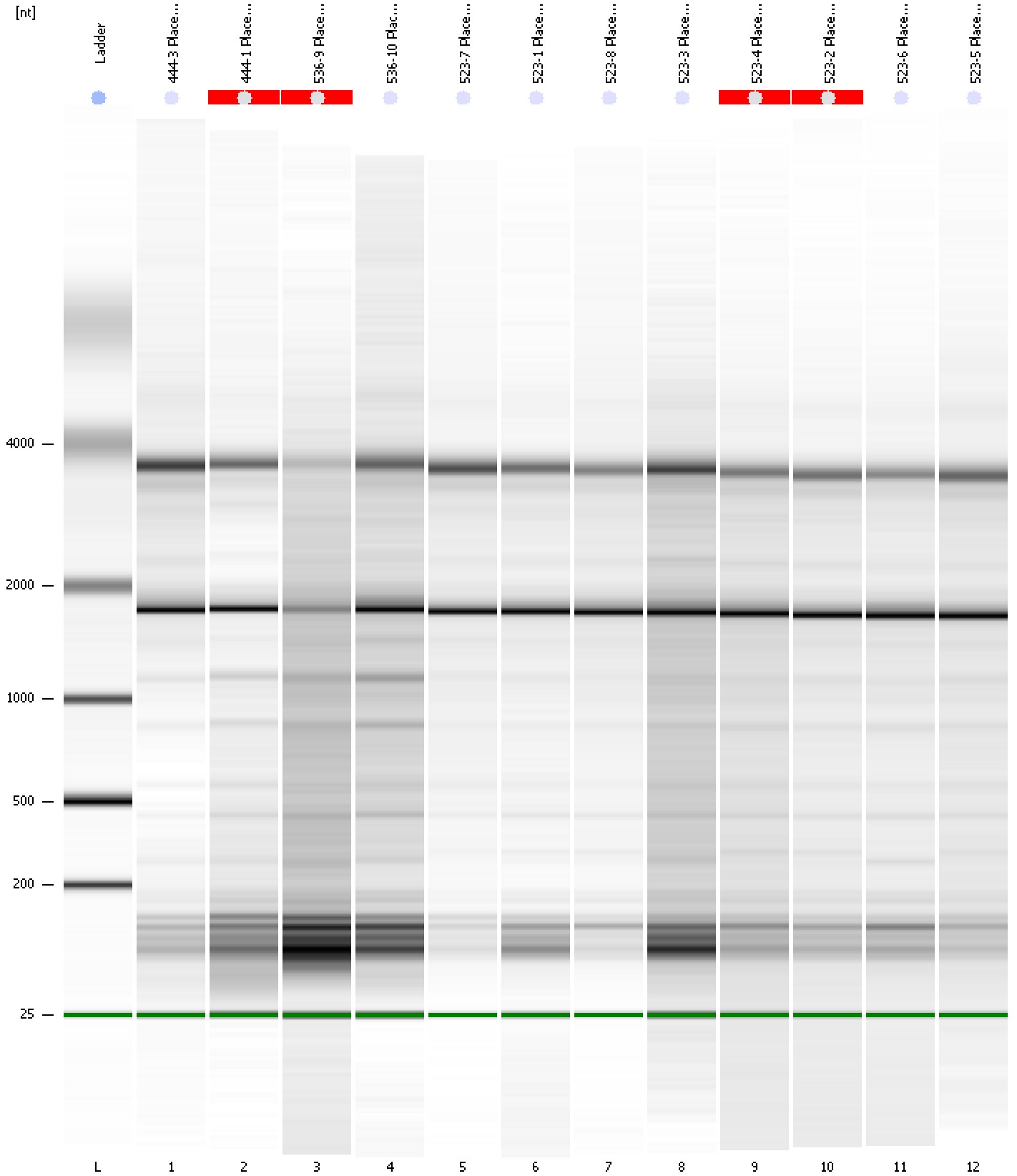
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,547	2,055	15.6	11.4
28S	3,138	3,972	13.3	9.7



Assay Class: Eukaryote Total RNA Nano  
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
Modified: 11/29/2016 12:49:56 PM

**Gel Image**



Assay Class: Eukaryote Total RNA Nano  
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-29\2016-11-29\_002.xad

Created: 11/29/2016 12:26:51 PM  
 Modified: 11/29/2016 12:49:56 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		11/29/2016 12:49:55 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-11-29\2016-11-29_002.xad)		Instrument	Run		11/29/2016 12:26:57 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/29/2016 12:26:57 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/29/2016 12:26:57 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/29/2016 12:26:57 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/29/2016 12:26:57 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/29/2016 12:26:57 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/29/2016 12:26:57 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1