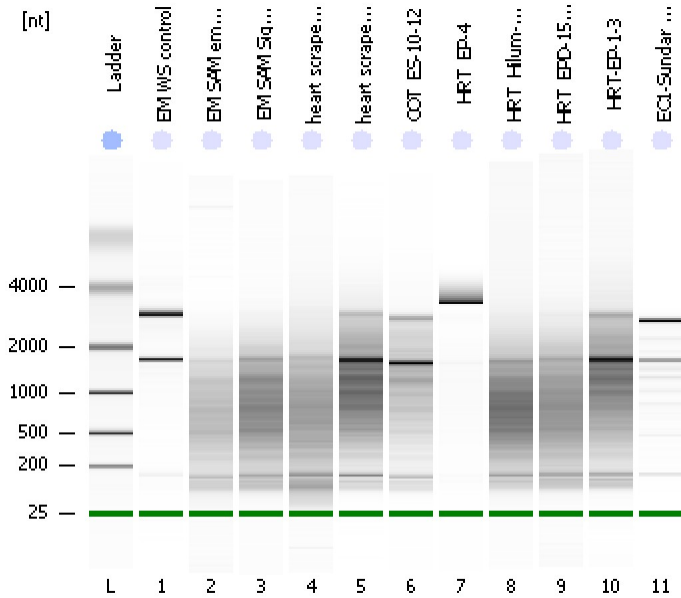


Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

Electrophoresis File Run Summary



Instrument Information:

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

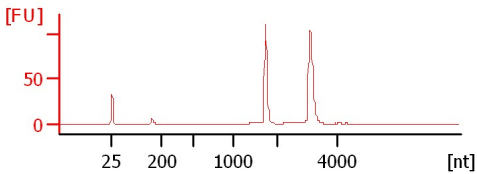
Assay Information:

Assay Origin Path: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\assays\RNA\Eukaryote Total RNA Pico Series II.xsy  
Assay Class: Eukaryote Total RNA Pico  
Version: 2.6  
Assay Comments: Total RNA Analysis pg sensitivity (Eukaryote)  
© Copyright 2003 - 2009 Agilent Technologies, Inc.

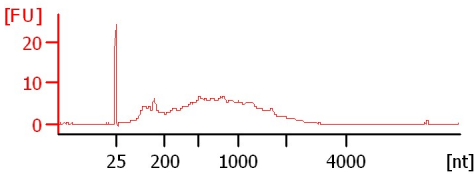
Chip Information:

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

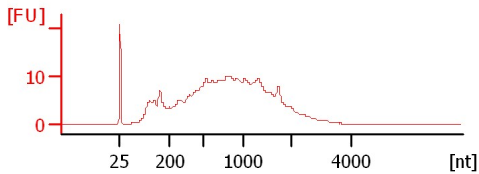
**EM WS control**  
RIN: 9.70



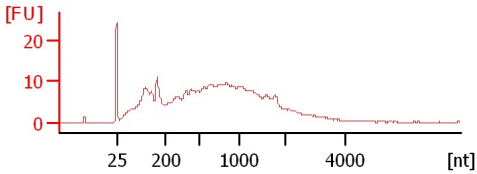
**EM SAM embed 4/13**  
RIN: 2.40



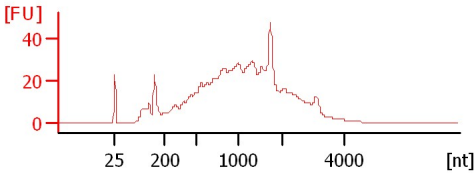
**EM SAM Sigma Paraplast 4/13**  
RIN: 2.80



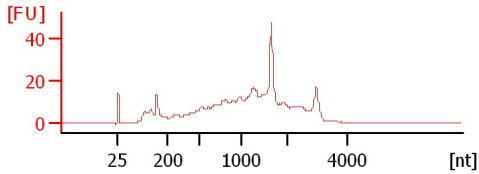
**heart scrape embed 4/20**  
RIN: 2.40



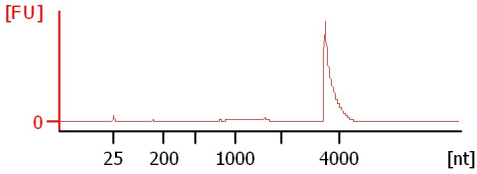
**heart scrape embed 4/27**  
RIN: 3.40



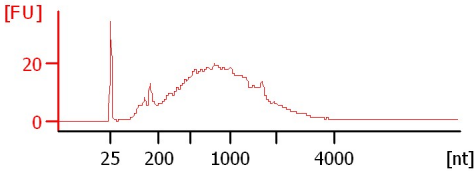
**COT\_ES-10-12**  
RIN: 5.20



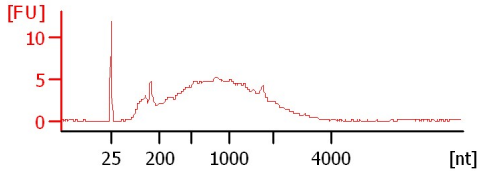
**HRT\_EP-4**  
RIN: 6.60



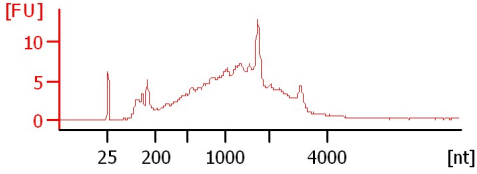
**HRT\_Hilum-1-5**  
RIN: 2.60



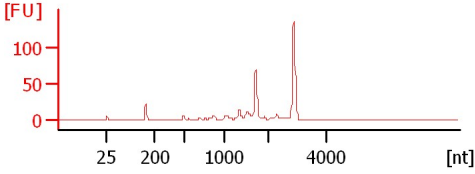
**HRT\_EPD-15-21**  
RIN: 2.80



**HRT-EP-1-3**  
RIN: 3.80



**EC1-Sundar Lab**  
RIN: 8.10



Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

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

Sample Name	Sample Comment	Status	Result Label	Result Color
EM WS control		✓	RIN: 9.70	
EM SAM embed 4/13		✓	RIN: 2.40	
EM SAM Sigma Paraplast 4/13		✓	RIN: 2.80	
heart scrape embed 4/20		✓	RIN: 2.40	
heart scrape embed 4/27		✓	RIN: 3.40	
COT_ES-10-12		✓	RIN: 5.20	
HRT_EP-4		✓	RIN: 6.60	
HRT_Hilum-1-5		✓	RIN: 2.60	
HRT_EPD-15-21		✓	RIN: 2.80	
HRT-EP-1-3		✓	RIN: 3.80	
EC1-Sundar Lab		✓	RIN: 8.10	
Ladder		✓	All Other Samples	

**Chip Lot #**

**Reagent Kit Lot #**

**Chip Comments :**

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

## Electrophoresis Assay Details

### General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12  
Minimum Visible Range [s] : 17  
Maximum Visible Range [s] : 70  
Start Analysis Time Range [s] : 18  
End Analysis Time Range [s] : 69  
Ladder Concentration [pg/ $\mu$ l] : 1000  
Lower Marker Concentration [pg/ $\mu$ l] : 0  
Upper Marker Concentration [pg/ $\mu$ l] : 0  
Used Lower Marker for Quantitation  
Standard Curve Fit is Logarithmic  
Show Data Aligned to Lower Marker

### Integrator Settings

Integration Start Time [s] : 18  
Integration End Time [s] : 69  
Slope Threshold : 0.6  
Height Threshold [FU] : 0.5  
Area Threshold : 0.2  
Width Threshold [s] : 0.3  
Baseline Plateau [s] : 6

### Filter Settings

Filter Width [s] : 0.5  
Polynomial Order : 4

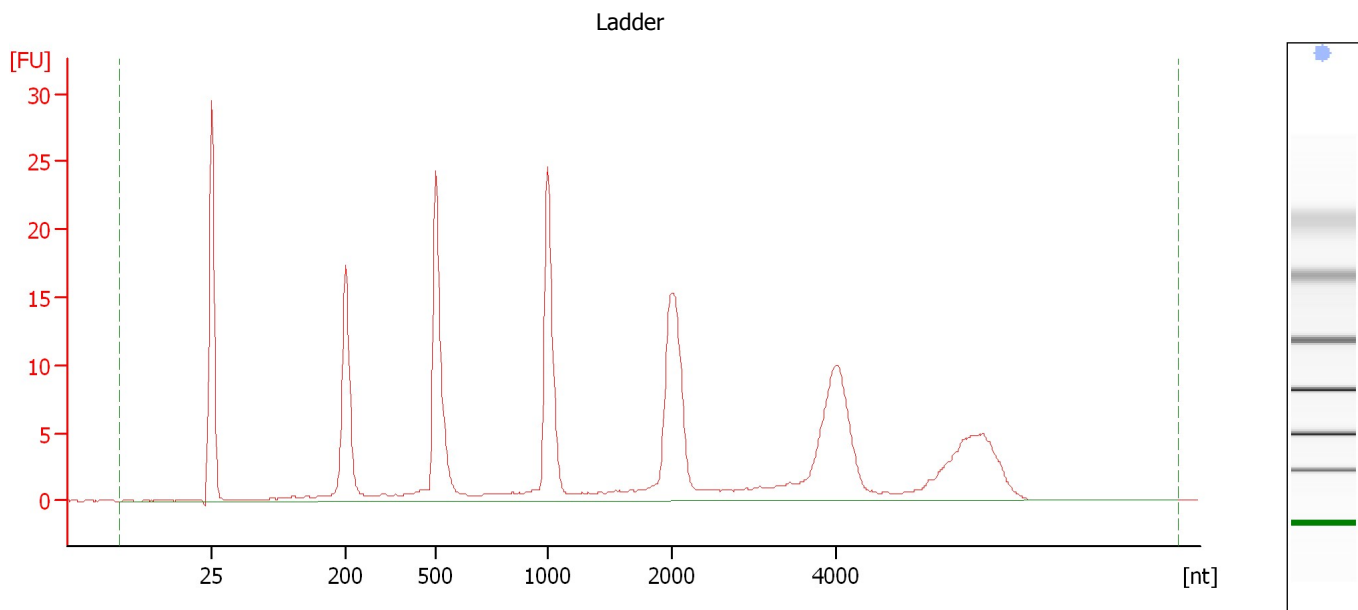
### Ladder

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

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary**



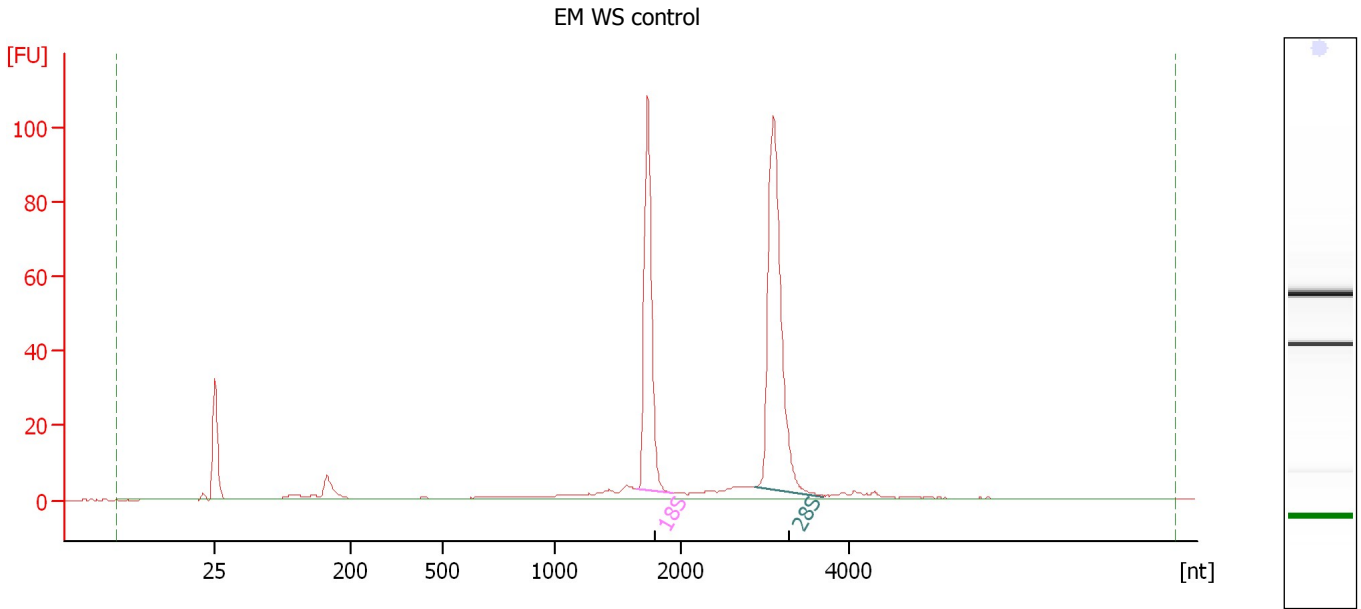
**Overall Results for Ladder**

RNA Area:	200.7	Result Flagging Color:	<span style="background-color: #add8e6; border: 1px solid black; display: inline-block; width: 20px; height: 10px;"></span>
RNA Concentration:	1,000 pg/ $\mu$ l	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : EM WS control**

RNA Area: 340.5                      RNA Integrity Number (RIN): 9.7 (B.02.08)  
RNA Concentration: 1,696 pg/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.5                      Result Flagging Label: RIN: 9.70

**Fragment table for sample 1 : EM WS control**

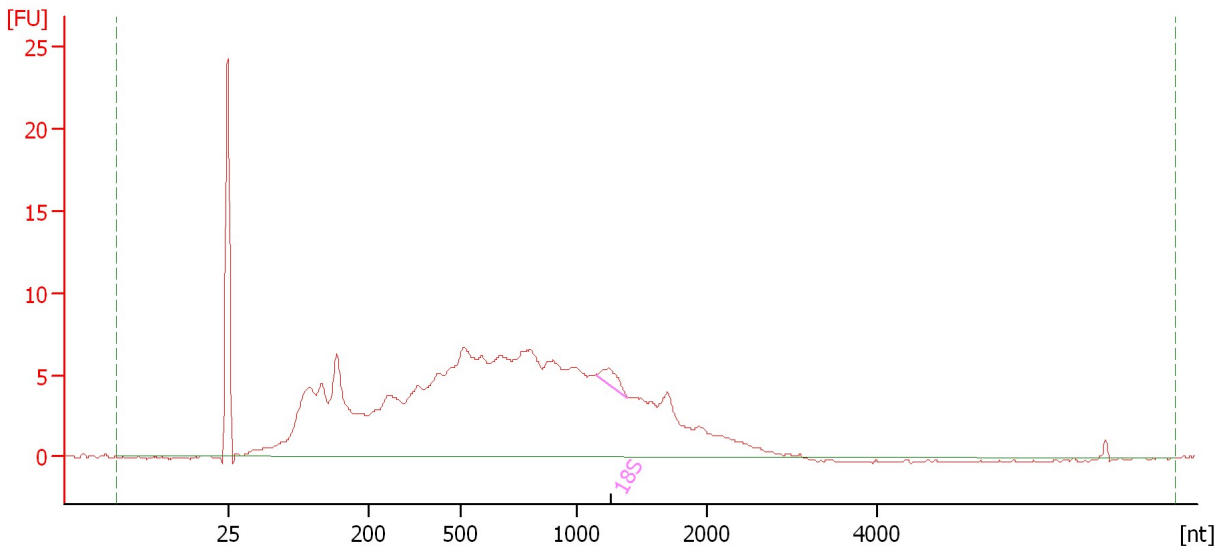
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,641	1,928	93.2	27.4
28S	2,879	3,700	137.5	40.4

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**

EM SAM embed 4/13



**Overall Results for sample 2 : EM SAM embed 4/13**

RNA Area:	243.9	RNA Integrity Number (RIN):	2.4 (B.02.08)
RNA Concentration:	1,215 pg/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: 2.40

**Fragment table for sample 2 : EM SAM embed 4/13**

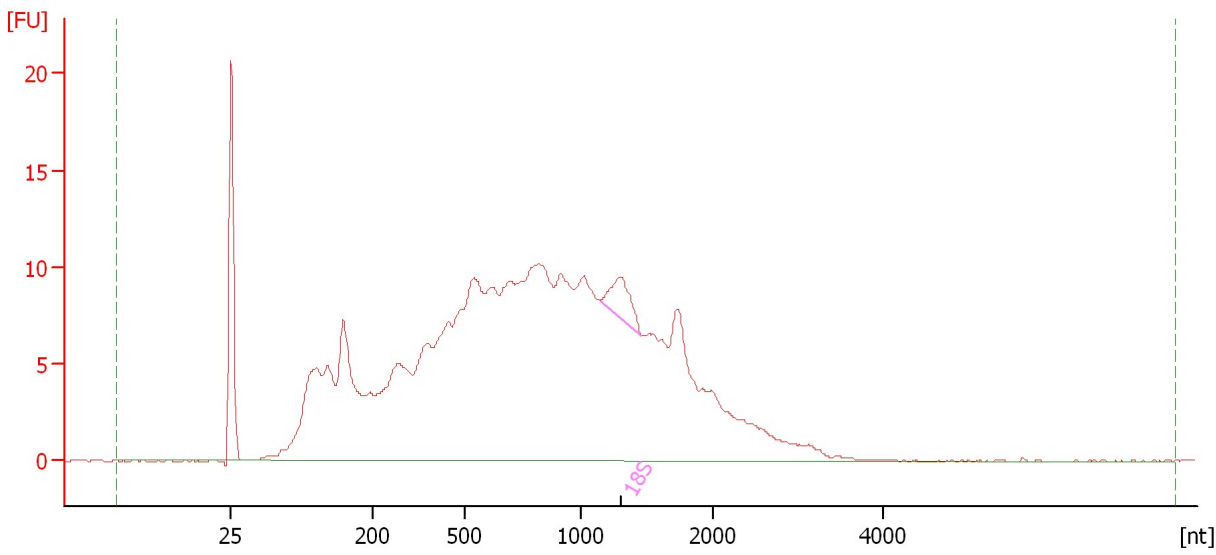
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,165	1,396	1.8	0.7

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**

EM SAM Sigma Paraplast 4/13



**Overall Results for sample 3 : EM SAM Sigma Paraplast 4/13**

RNA Area:	367.9	RNA Integrity Number (RIN):	2.8 (B.02.08)
RNA Concentration:	1,833 pg/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: 2.80

**Fragment table for sample 3 : EM SAM Sigma Paraplast 4/13**

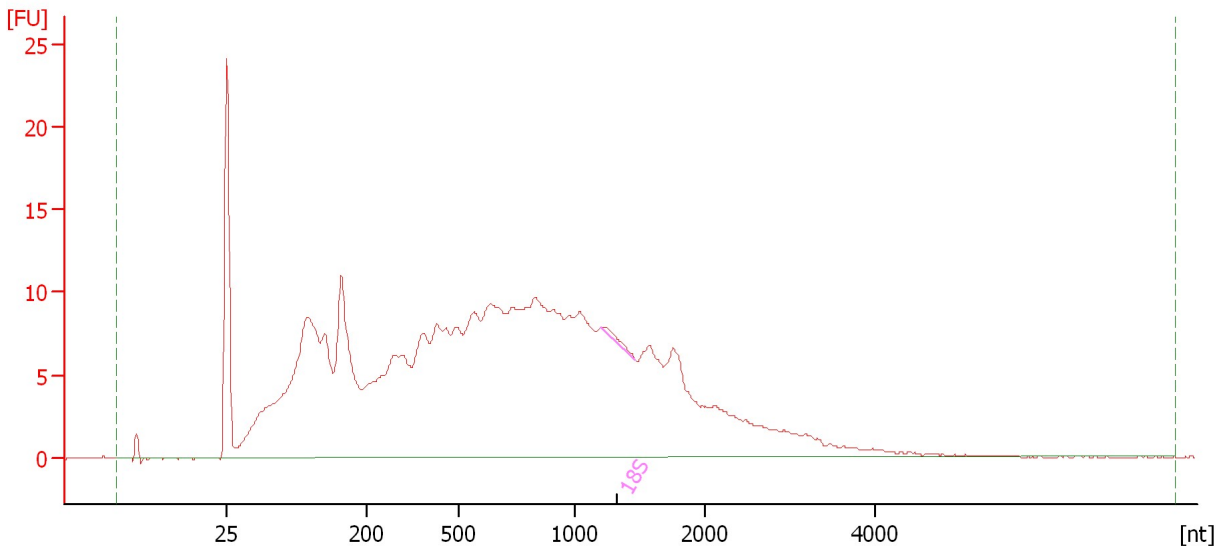
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,140	1,459	5.1	1.4

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**

heart scrape embed 4/20



**Overall Results for sample 4 : heart scrape embed 4/20**

RNA Area:	430.2	RNA Integrity Number (RIN):	2.4 (B.02.08)
RNA Concentration:	2,143 pg/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: 2.40

**Fragment table for sample 4 : heart scrape embed 4/20**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,196	1,468	1.0	0.2



Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : heart scrape embed 4/27**

RNA Area: 1,027.2 RNA Integrity Number (RIN): 3.4 (B.02.08)  
RNA Concentration: 5,118 pg/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.2 Result Flagging Label: RIN: 3.40

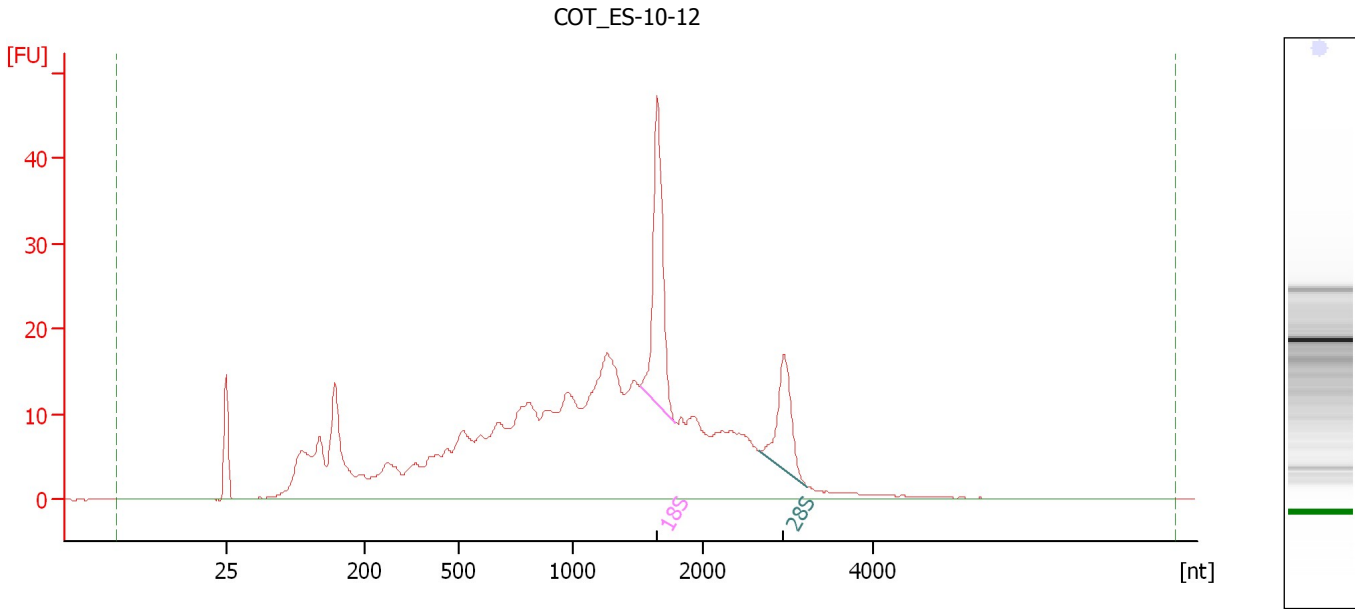
**Fragment table for sample 5 : heart scrape embed 4/27**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,597	1,879	33.7	3.3
28S	2,974	3,314	7.3	0.7

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : COT\_ES-10-12**

RNA Area: 541.3                      RNA Integrity Number (RIN): 5.2 (B.02.08)  
RNA Concentration: 2,697 pg/μl              Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.5              Result Flagging Label: RIN: 5.20

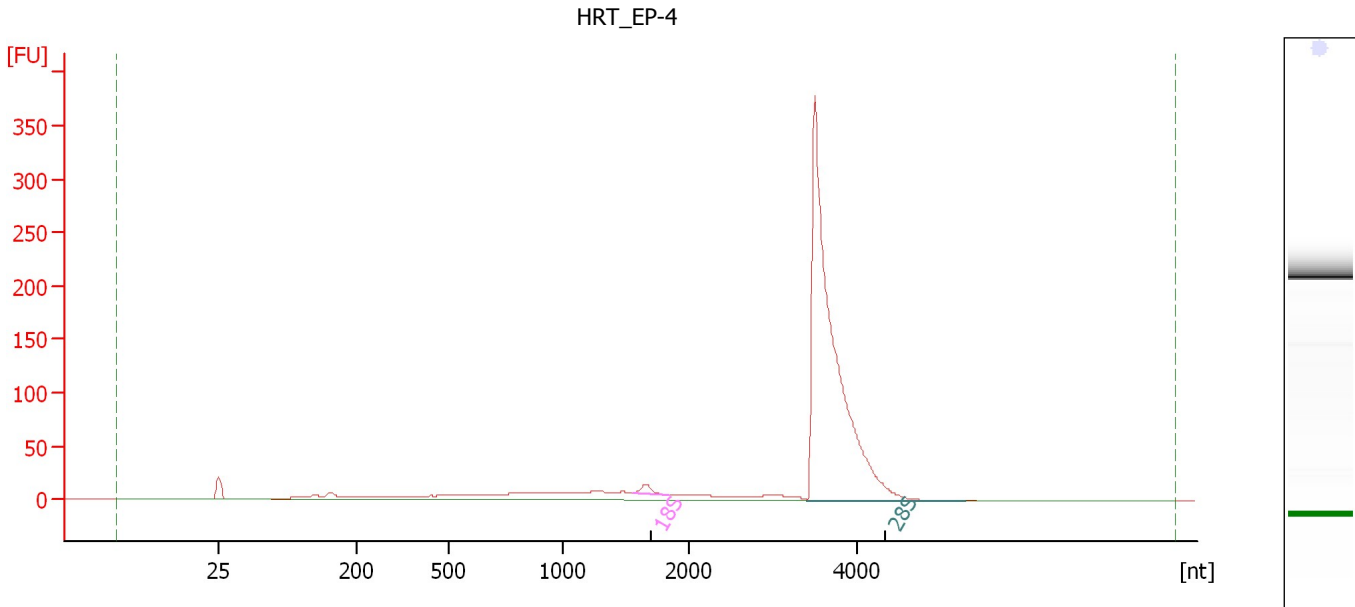
**Fragment table for sample 6 : COT\_ES-10-12**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,524	1,789	40.5	7.5
28S	2,672	3,225	19.5	3.6

Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
 Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : HRT\_EP-4**

RNA Area:	1,098.4	RNA Integrity Number (RIN):	6.6 (B.02.08, Anomaly Threshold(s) manually adapted)
RNA Concentration:	5,473 pg/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]:	81.7	Result Flagging Label:	RIN: 6.60

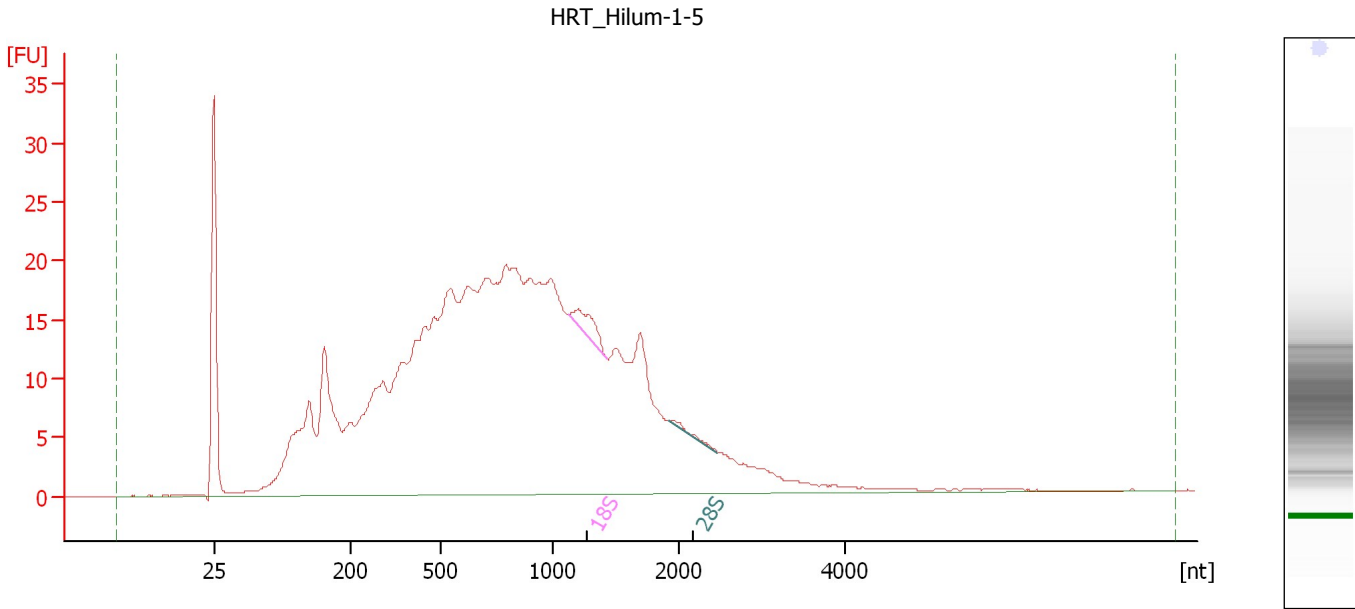
**Fragment table for sample 7 : HRT\_EP-4**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,547	1,832	9.7	0.9
28S	3,398	5,281	794.8	72.4

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : HRT Hilum-1-5**

RNA Area: 671.6 RNA Integrity Number (RIN): 2.6 (B.02.08)  
RNA Concentration: 3,346 pg/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.2 Result Flagging Label: RIN: 2.60

**Fragment table for sample 8 : HRT Hilum-1-5**

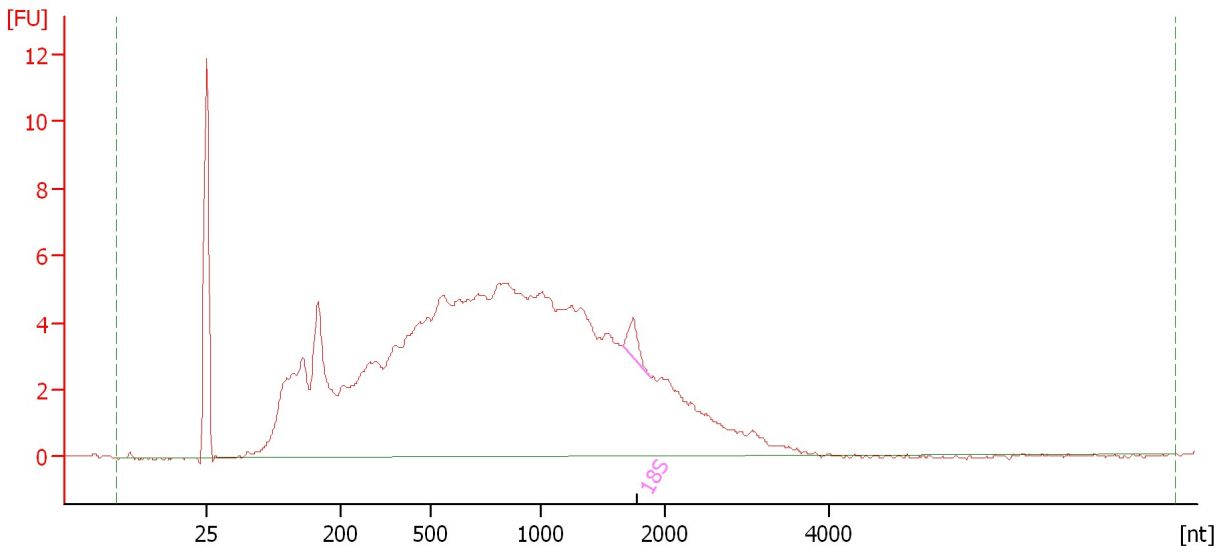
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,115	1,420	5.3	0.8
28S	1,910	2,455	0.9	0.1

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**

HRT\_EPD-15-21



**Overall Results for sample 9 : HRT EPD-15-21**

RNA Area:	198.1	RNA Integrity Number (RIN):	2.8 (B.02.08)
RNA Concentration:	987 pg/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: 2.80

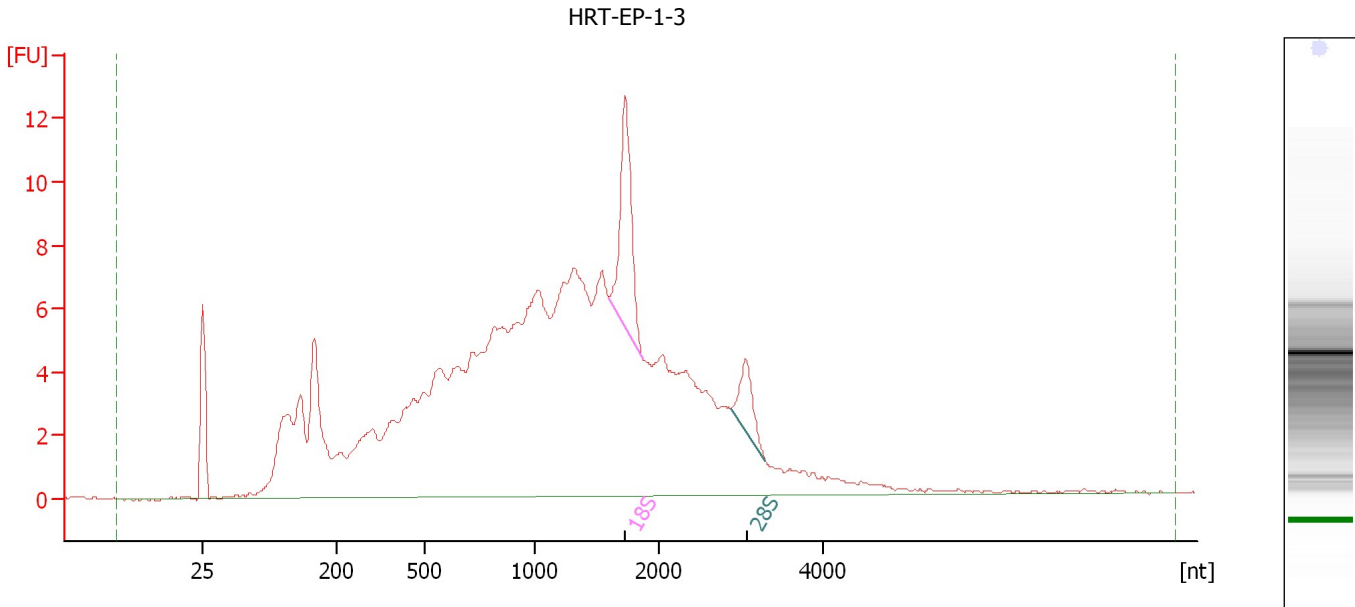
**Fragment table for sample 9 : HRT EPD-15-21**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,655	1,878	1.5	0.7

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : HRT-EP-1-3**

RNA Area: 252.8                      RNA Integrity Number (RIN): 3.8 (B.02.08)  
RNA Concentration: 1,260 pg/μl                      Result Flagging Color:   
rRNA Ratio [28s / 18s]: 0.3                      Result Flagging Label: RIN: 3.80

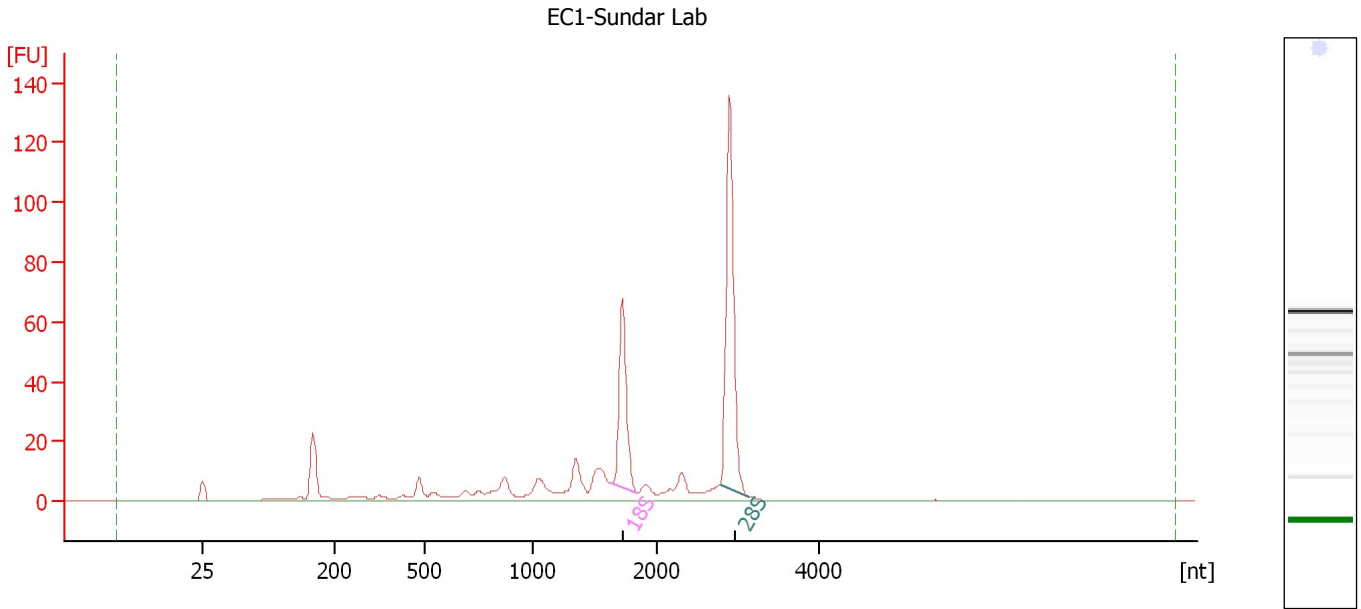
**Fragment table for sample 10 : HRT-EP-1-3**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,589	1,866	10.0	4.0
28S	2,873	3,306	3.3	1.3

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : EC1-Sundar Lab**

RNA Area: 383.0 RNA Integrity Number (RIN): 8.1 (B.02.08)  
RNA Concentration: 1,908 pg/μl Result Flagging Color:   
rRNA Ratio [28s / 18s]: 1.9 Result Flagging Label: RIN: 8.10

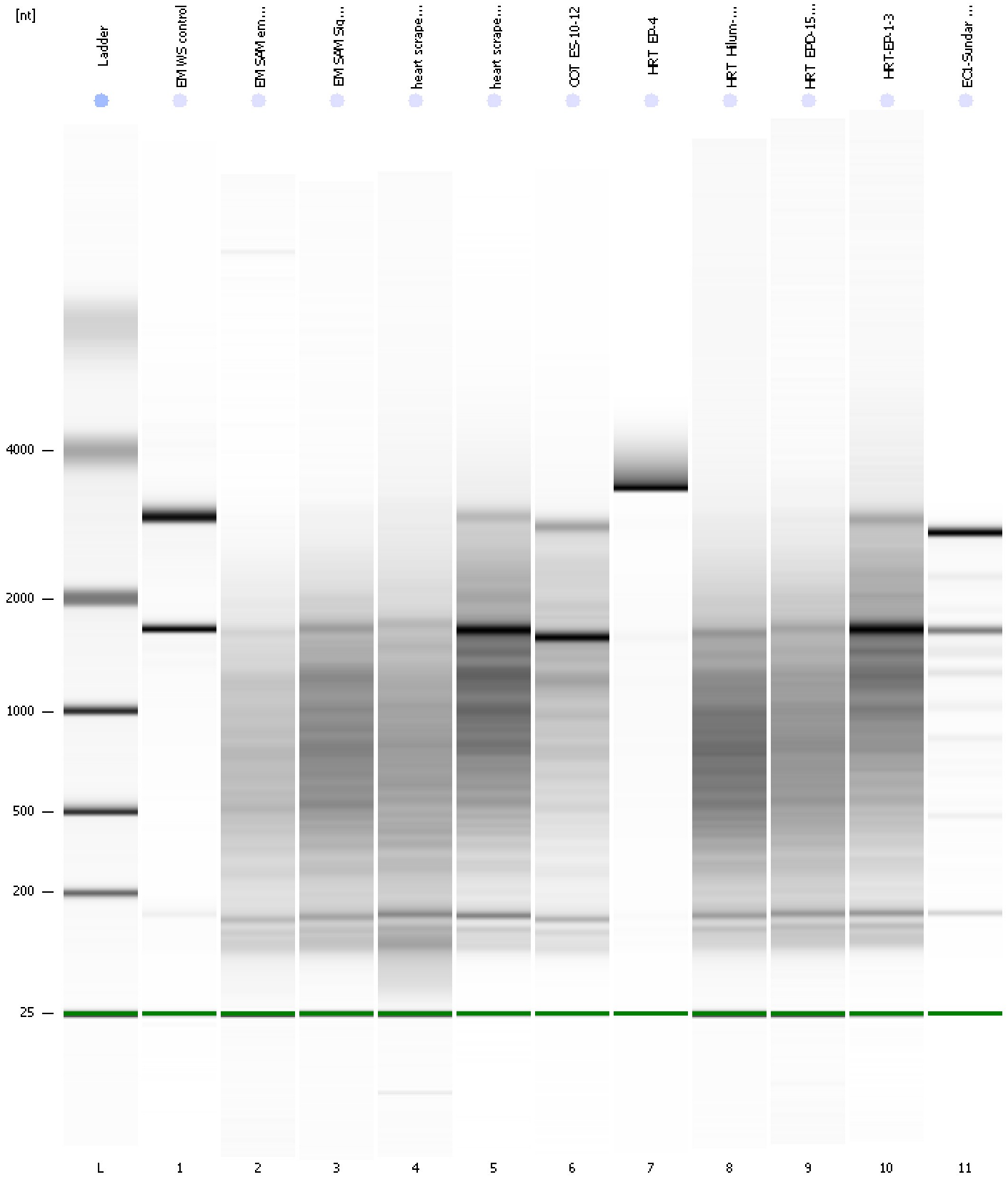
**Fragment table for sample 11 : EC1-Sundar Lab**

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,631	1,839	58.9	15.4
28S	2,781	3,136	111.9	29.2

Assay Class: Eukaryote Total RNA Pico  
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
Modified: 5/4/2012 3:00:23 PM

**Gel Image**





Assay Class: Eukaryote Total RNA Pico  
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-04\2012-05-04\_004.xad

Created: 5/4/2012 2:29:24 PM  
 Modified: 5/4/2012 3:00:23 PM

**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		5/4/2012 2:52:18 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-04\2012-05-04_004.xad)		Instrument	Run		5/4/2012 2:29:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/4/2012 2:29:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/4/2012 2:29:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/4/2012 2:29:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/4/2012 2:29:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/4/2012 2:29:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/4/2012 2:29:30 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1