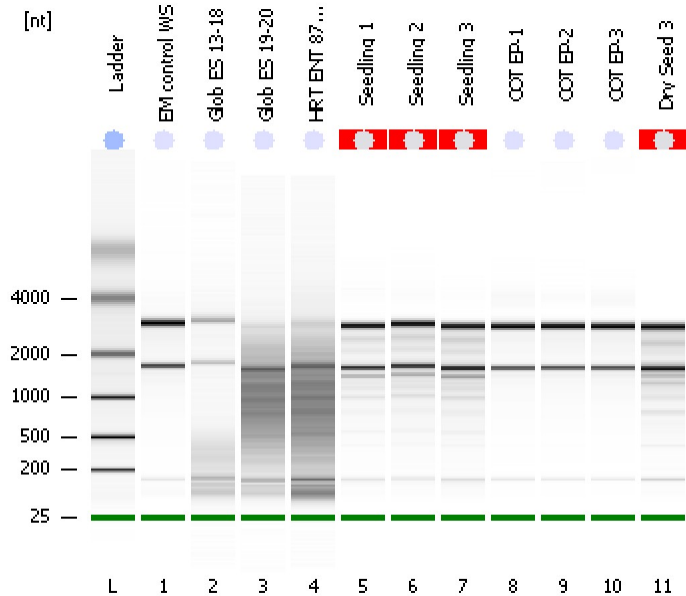


Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 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

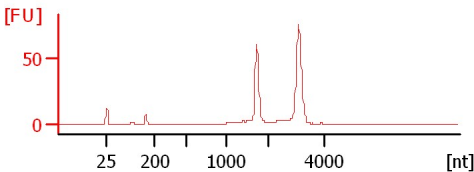
Assay Class: Eukaryote Total RNA Pico
Version: 2.6
Assay Comments: Total RNA Analysis pg sensitivity (Eukaryote)

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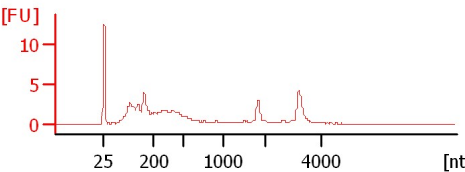
Chip Information:

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

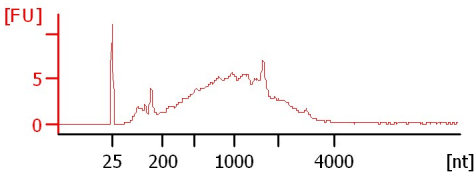
EM control WS
RIN: 9.60



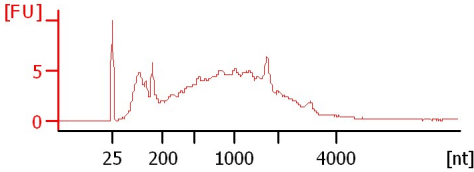
Glob ES 13-18
RIN: 6.40



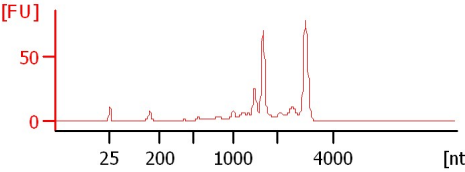
Glob ES 19-20
RIN: 3.50



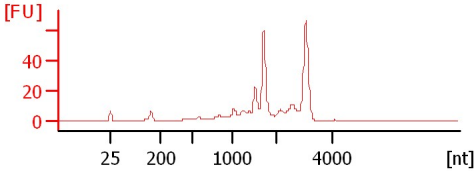
HRT ENT 87-102
RIN: 3.10



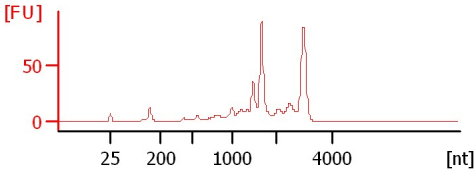
Seedling 1
RIN N/A



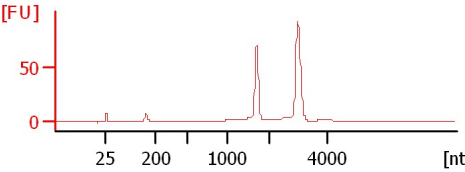
Seedling 2
RIN N/A



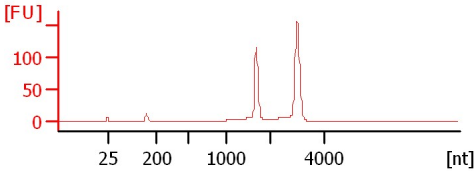
Seedling 3
RIN N/A



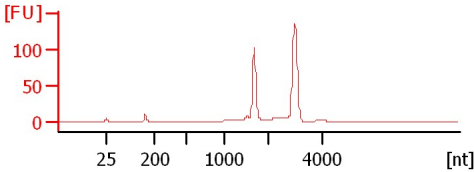
COT EP-1
RIN: 9.70



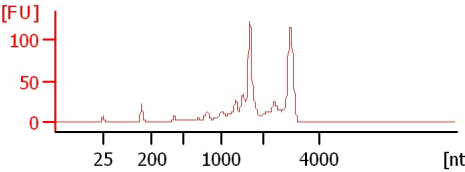
COT EP-2
RIN: 9.60



COT EP-3
RIN: 9.60



Dry Seed 3
RIN N/A



Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
 Modified: 8/20/2013 3:38:46 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
EM control WS		✓	RIN: 9.60	
Glob ES 13-18		✓	RIN: 6.40	
Glob ES 19-20		✓	RIN: 3.50	
HRT ENT 87-102		✓	RIN: 3.10	
Seedling 1		✓	RIN N/A	
Seedling 2		✓	RIN N/A	
Seedling 3		✓	RIN N/A	
COT EP-1		✓	RIN: 9.70	
COT EP-2		✓	RIN: 9.60	
COT EP-3		✓	RIN: 9.60	
Dry Seed 3		✓	RIN N/A	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 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/ μ l] : 1000
Lower Marker Concentration [pg/ μ l] : 0
Upper Marker Concentration [pg/ μ 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

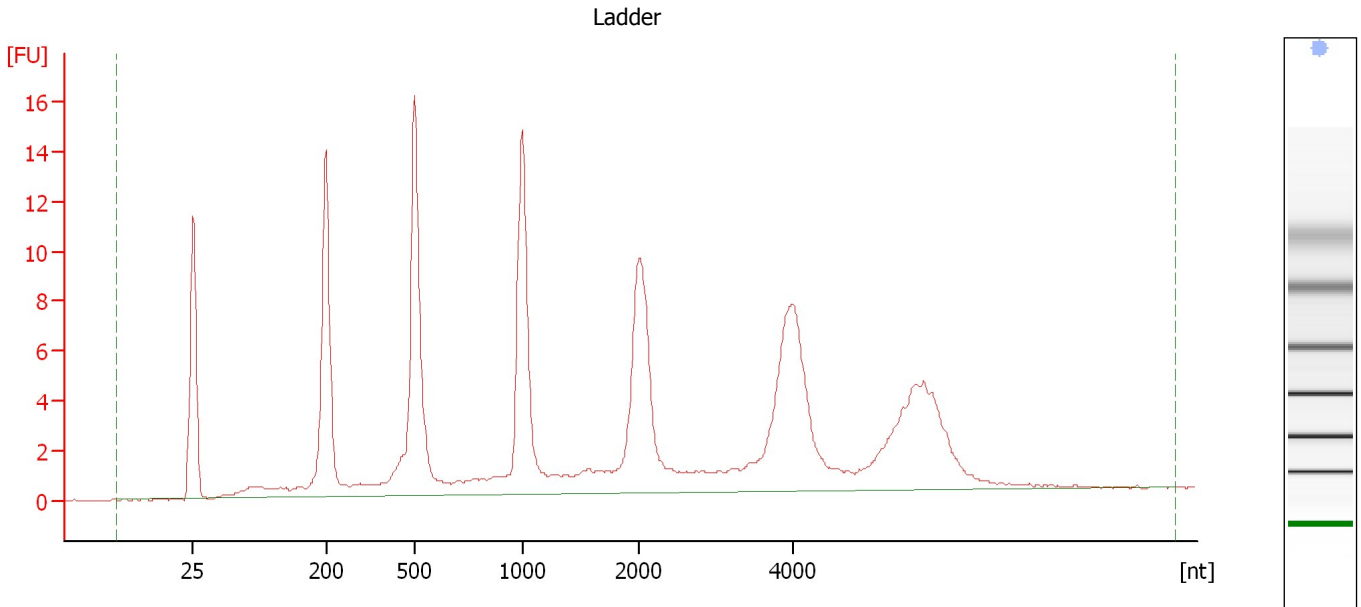
Ladder

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\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary



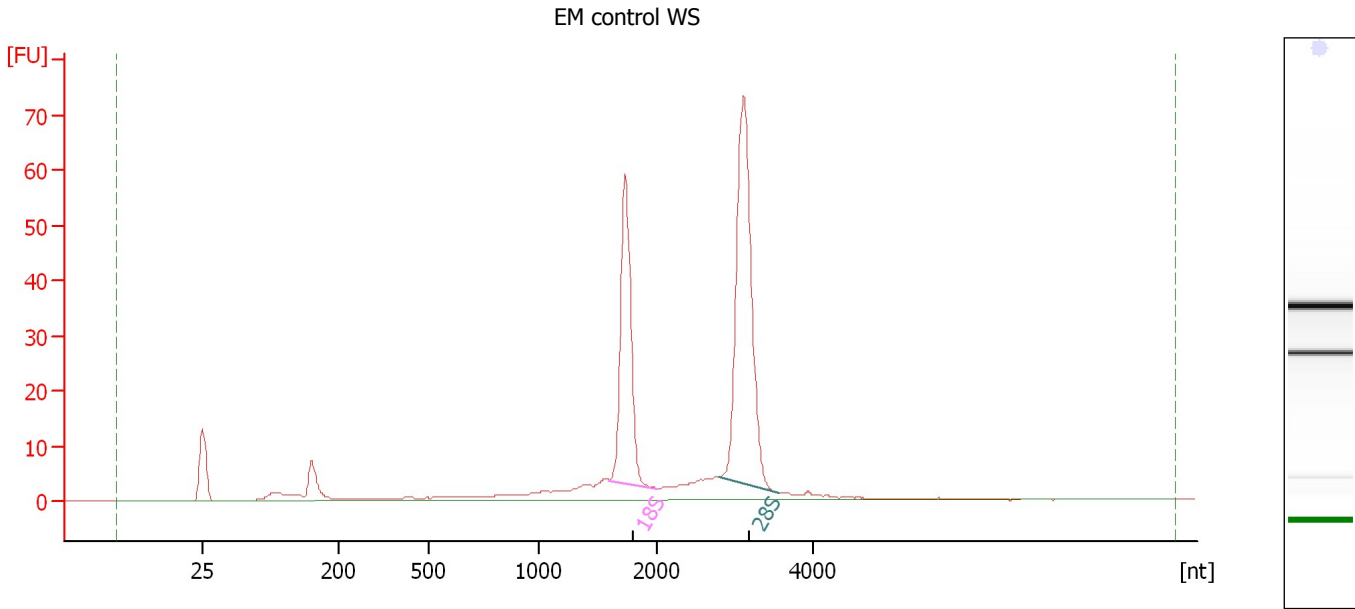
Overall Results for Ladder

RNA Area:	172.7	Result Flagging Color:	
RNA Concentration:	1,000 pg/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : EM control WS

RNA Area:	297.4	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	1,722 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.6	Result Flagging Label:	RIN: 9.60

Fragment table for sample 1 : EM control WS

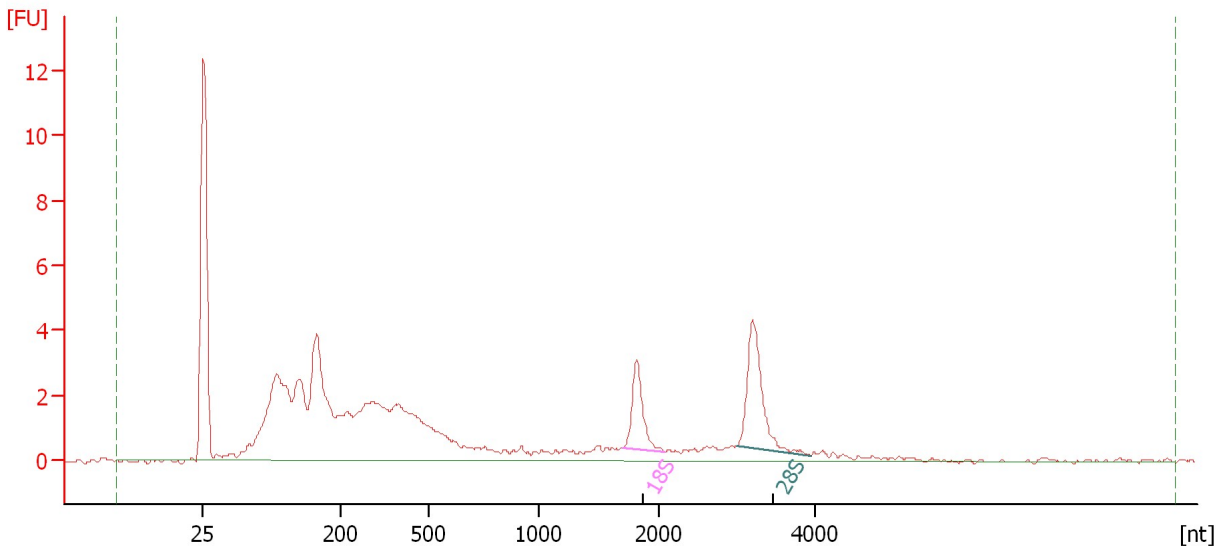
Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,597	1,989	71.0	23.9
28S	2,779	3,561	116.4	39.1

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...

Glob ES 13-18



Overall Results for sample 2 : Glob ES 13-18

RNA Area: 80.5 RNA Integrity Number (RIN): 6.4 (B.02.08)
RNA Concentration: 466 µg/µl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN: 6.40

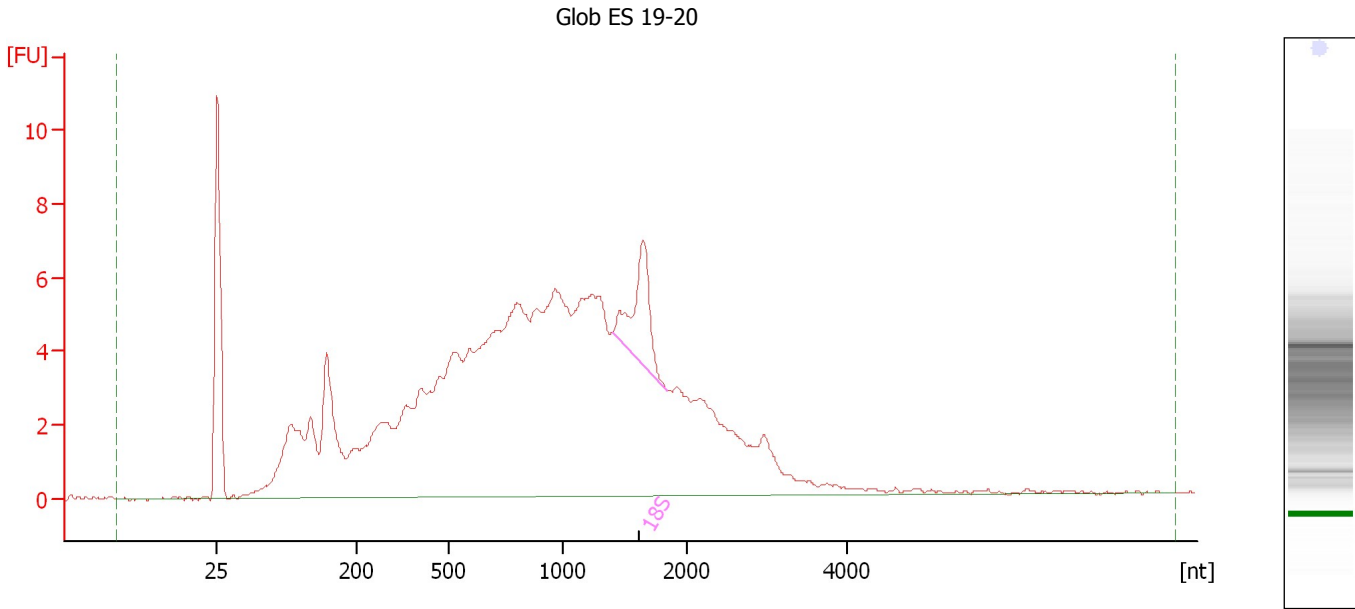
Fragment table for sample 2 : Glob ES 13-18

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,696	2,067	3.7	4.6
28S	2,984	3,929	6.4	8.0

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Glob ES 19-20

RNA Area:	204.5	RNA Integrity Number (RIN):	3.5 (B.02.08)
RNA Concentration:	1,184 pg/ μ l	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 3.50

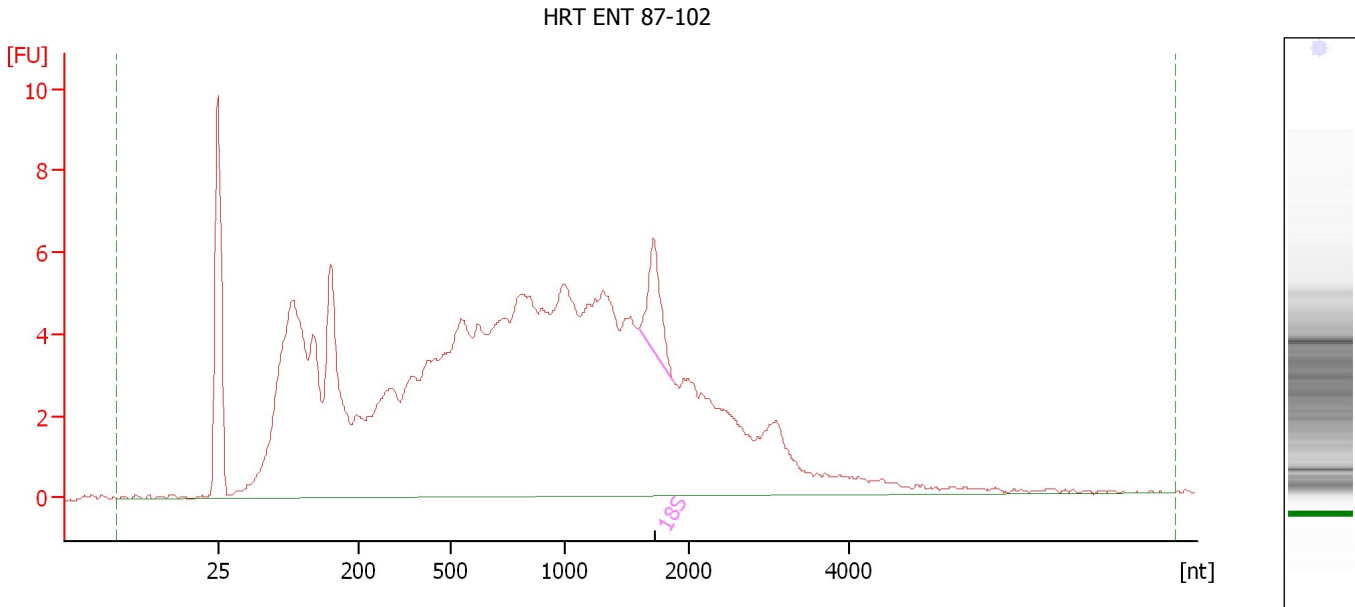
Fragment table for sample 3 : Glob ES 19-20

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,403	1,836	6.7	3.3

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HRT ENT 87-102

RNA Area:	232.3	RNA Integrity Number (RIN):	3.1 (B.02.08)
RNA Concentration:	1,345 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	0.0	Result Flagging Label:	RIN: 3.10

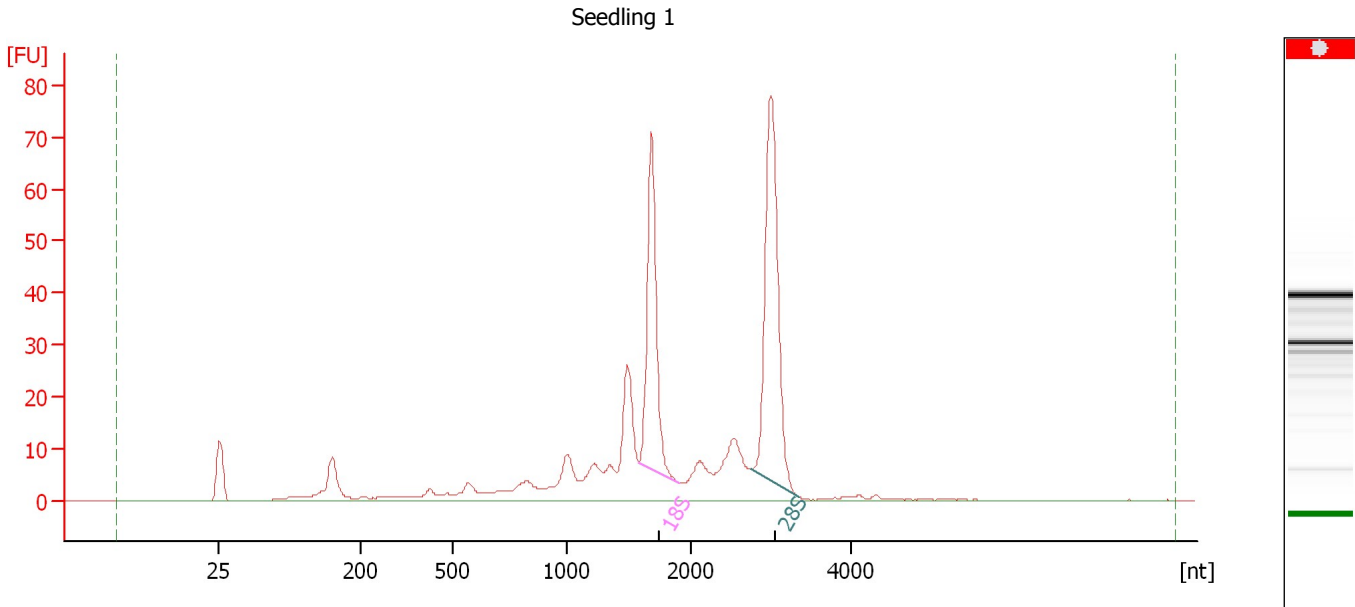
Fragment table for sample 4 : HRT ENT 87-102

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,595	1,872	4.2	1.8

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Seedling 1

RNA Area:	403.2	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	2,334 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.4	Result Flagging Label:	RIN N/A

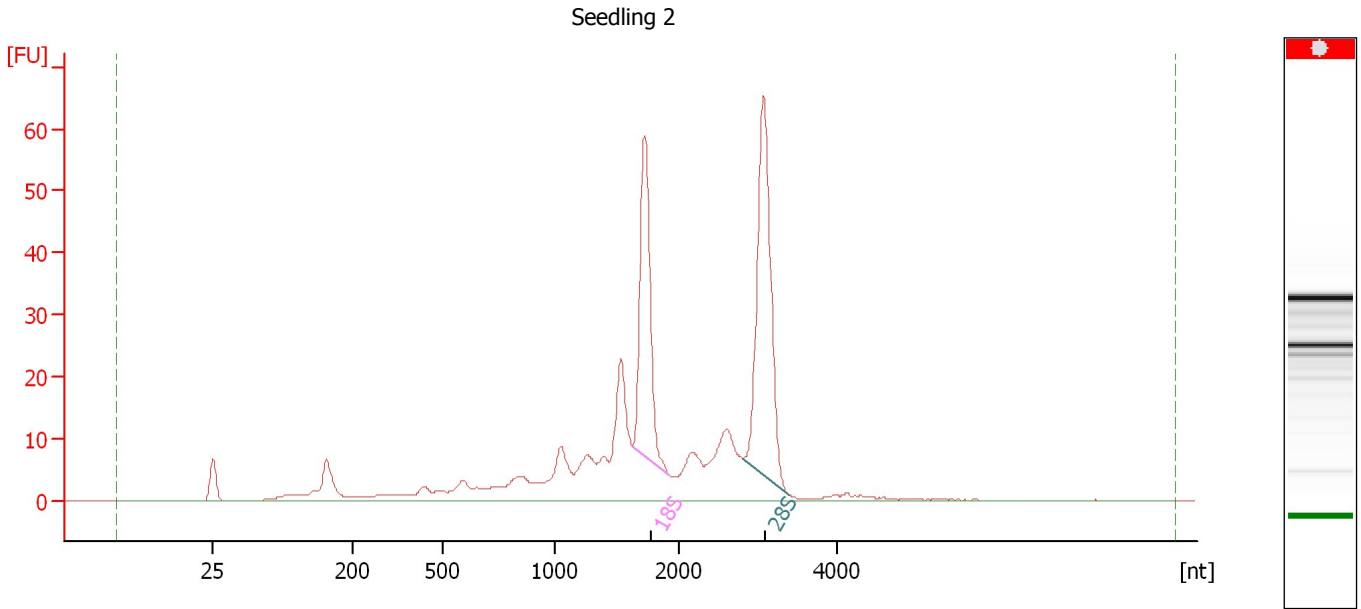
Fragment table for sample 5 : Seedling 1

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,588	1,908	72.0	17.9
28S	2,747	3,344	101.8	25.3

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Seedling 2

RNA Area:	402.5	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	2,330 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.4	Result Flagging Label:	RIN N/A

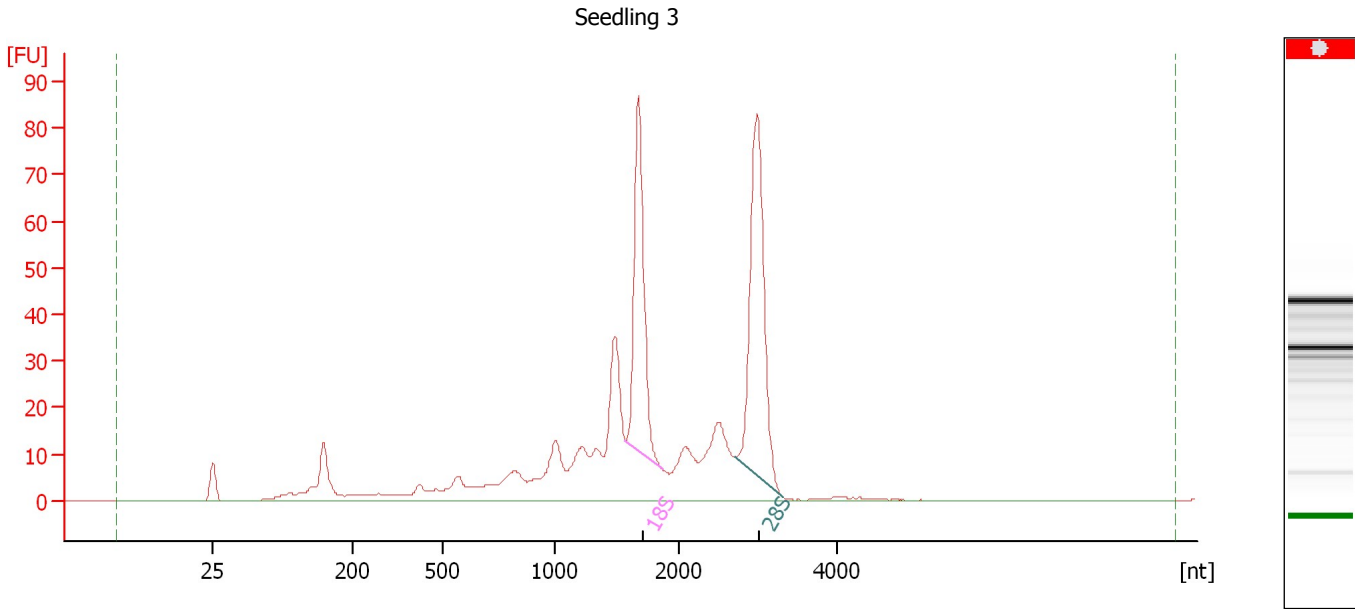
Fragment table for sample 6 : Seedling 2

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,622	1,928	63.7	15.8
28S	2,802	3,393	90.7	22.5

Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
 Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Seedling 3

RNA Area:	575.5	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	3,332 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.3	Result Flagging Label:	RIN N/A

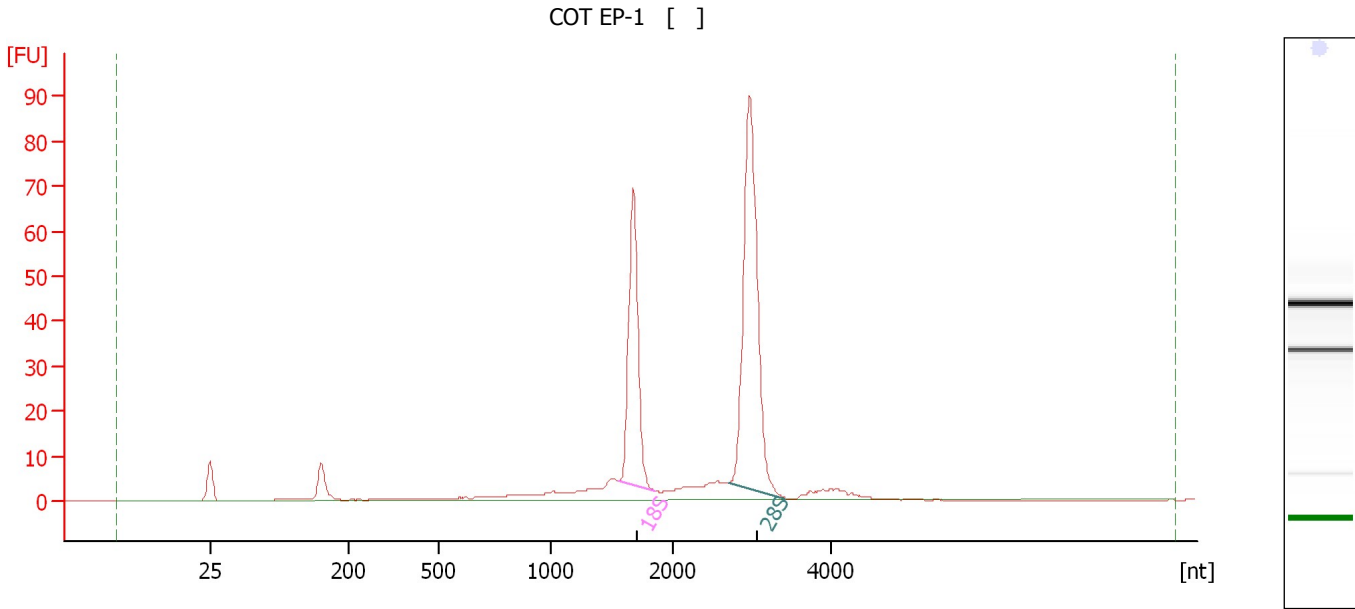
Fragment table for sample 7 : Seedling 3

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,570	1,867	91.8	16.0
28S	2,722	3,313	116.2	20.2

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : COT EP-1

RNA Area:	320.7	RNA Integrity Number (RIN):	9.7 (B.02.08)
RNA Concentration:	1,856 µg/µl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.7	Result Flagging Label:	RIN: 9.70

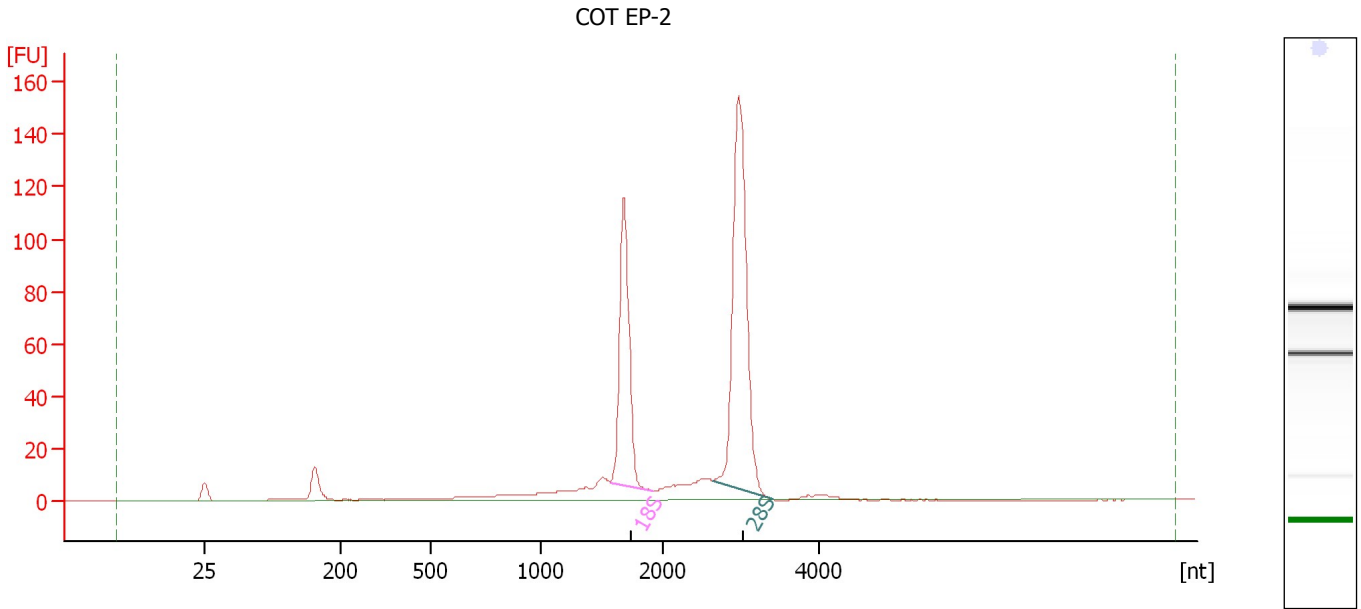
Fragment table for sample 8 : COT EP-1

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,565	1,863	76.7	23.9
28S	2,723	3,439	132.0	41.2

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : COT EP-2

RNA Area:	524.1	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	3,034 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.8	Result Flagging Label:	RIN: 9.60

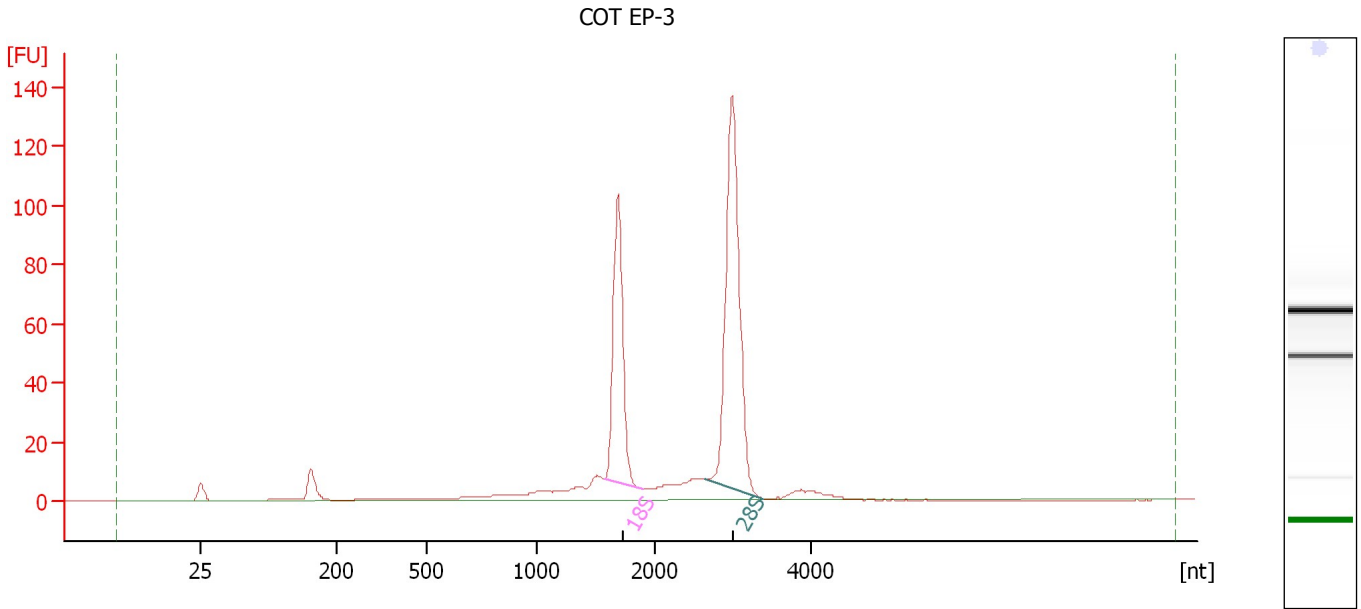
Fragment table for sample 9 : COT EP-2

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,574	1,920	130.0	24.8
28S	2,656	3,421	227.8	43.5

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : COT EP-3

RNA Area:	494.2	RNA Integrity Number (RIN):	9.6 (B.02.08)
RNA Concentration:	2,861 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.7	Result Flagging Label:	RIN: 9.60

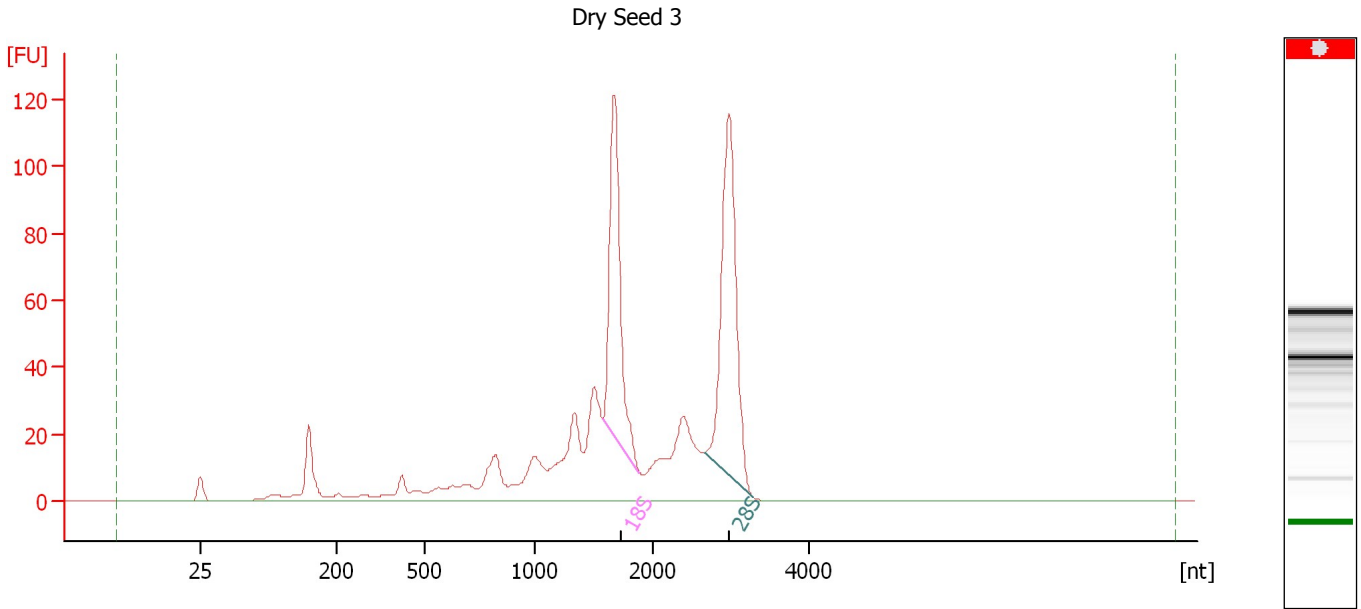
Fragment table for sample 10 : COT EP-3

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,568	1,890	116.4	23.6
28S	2,628	3,371	202.1	40.9

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Dry Seed 3

RNA Area:	807.1	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	4,672 pg/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.3	Result Flagging Label:	RIN N/A

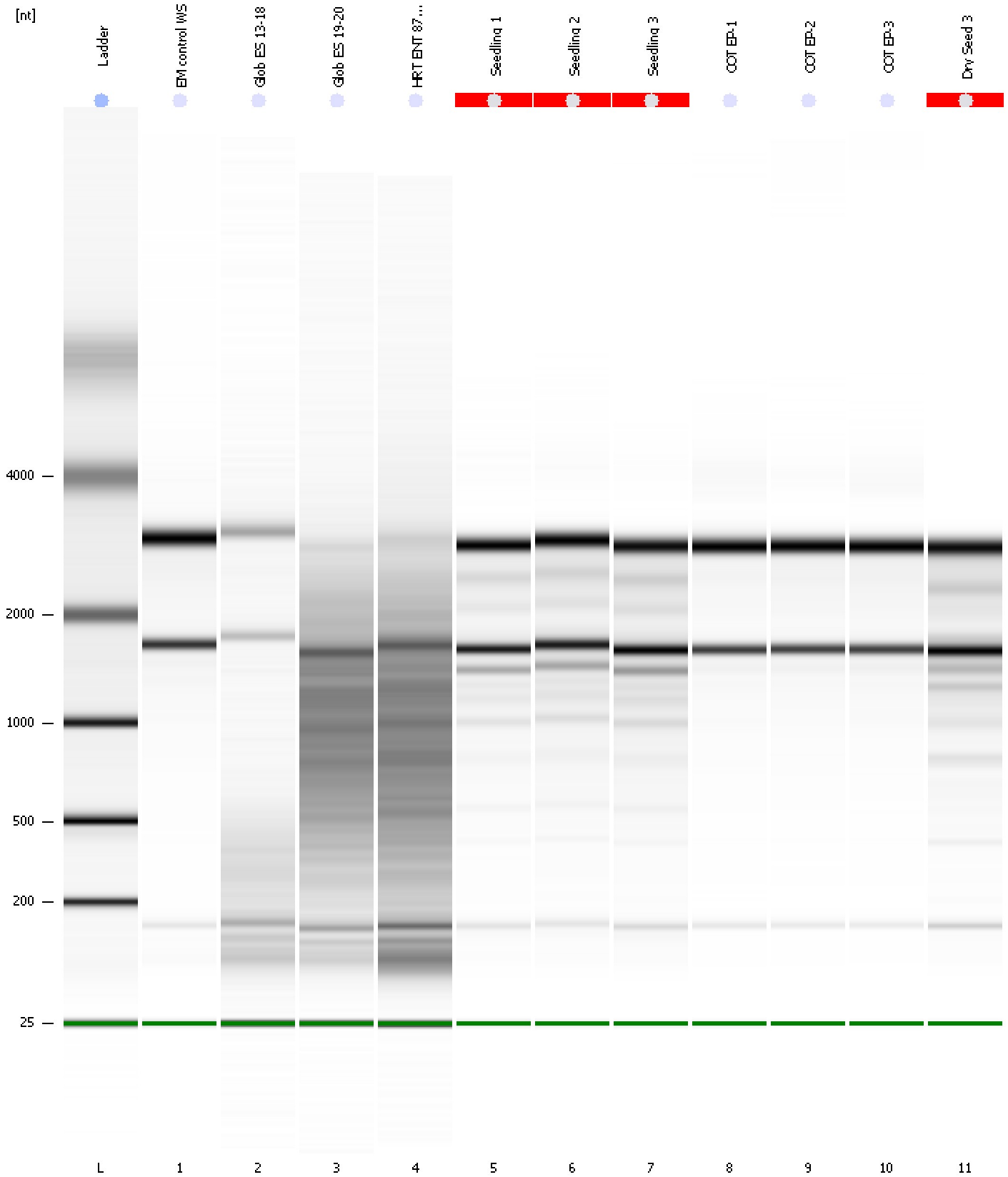
Fragment table for sample 11 : Dry Seed 3

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,567	1,880	134.6	16.7
28S	2,656	3,276	176.2	21.8

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
Modified: 8/20/2013 3:38:46 PM

Gel Image



Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad

Created: 8/20/2013 3:15:50 PM
 Modified: 8/20/2013 3:38:46 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		8/20/2013 3:38:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-08-20\2013-08-20_002.xad)		Instrument	Run		8/20/2013 3:15:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/20/2013 3:15:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/20/2013 3:15:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/20/2013 3:15:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/20/2013 3:15:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/20/2013 3:15:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/20/2013 3:15:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1