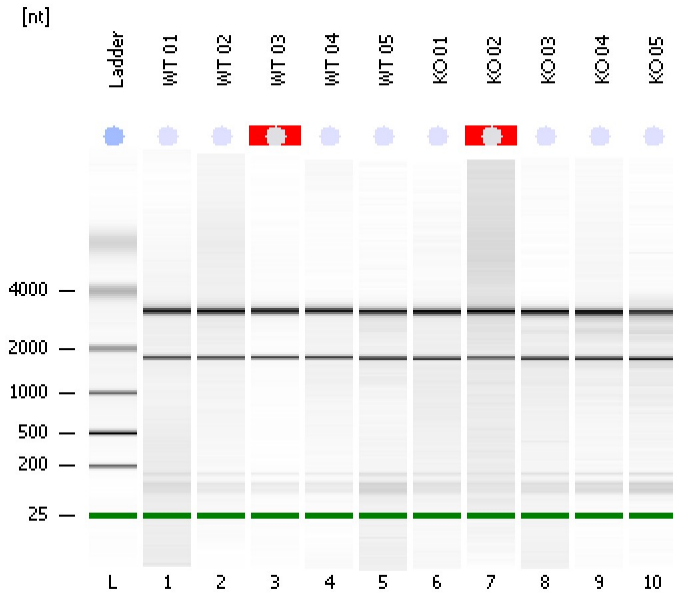


Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electrophoresis File Run Summary



Instrument Information:

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

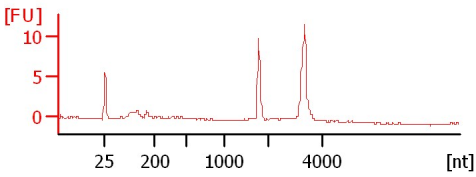
Assay Information:

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.

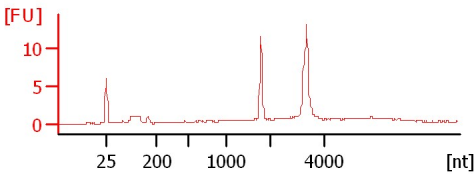
Chip Information:

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

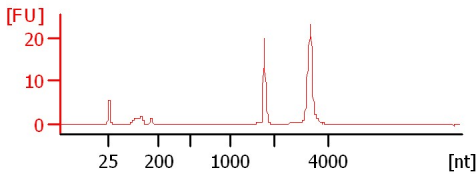
WT 01
 RIN: 9.20



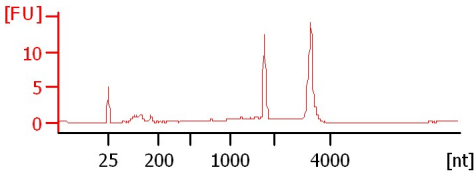
WT 02
 RIN: 8.50



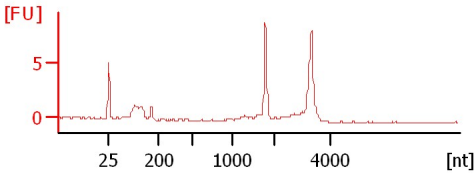
WT 03
 RIN N/A



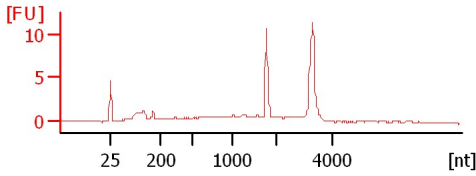
WT 04
 RIN: 8.20



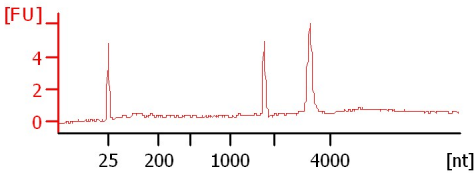
WT 05
 RIN: 9.50



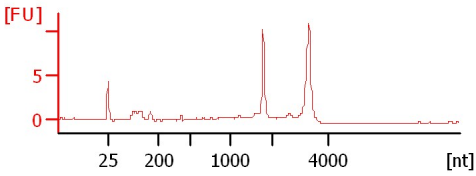
KO 01
 RIN: 7.50



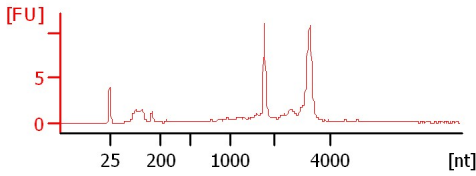
KO 02
 RIN N/A



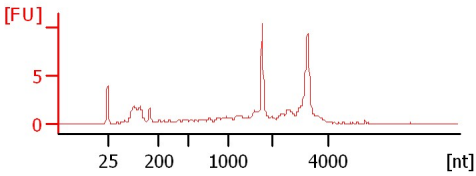
KO 03
 RIN: 8



KO 04
 RIN: 8.30



KO 05
 RIN: 7.90



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
WT 01		✓	RIN: 9.20	
WT 02		✓	RIN: 8.50	
WT 03		✓	RIN N/A	
WT 04		✓	RIN: 8.20	
WT 05		✓	RIN: 9.50	
KO 01		✓	RIN: 7.50	
KO 02		✓	RIN N/A	
KO 03		✓	RIN:8	
KO 04		✓	RIN: 8.30	
KO 05		✓	RIN: 7.90	
Ladder		✓	All Other Samples	

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
Modified: 11/28/2016 12:54:09 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/ μ l] : 150
Lower Marker Concentration [ng/ μ l] : 0
Upper Marker Concentration [ng/ 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] : 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

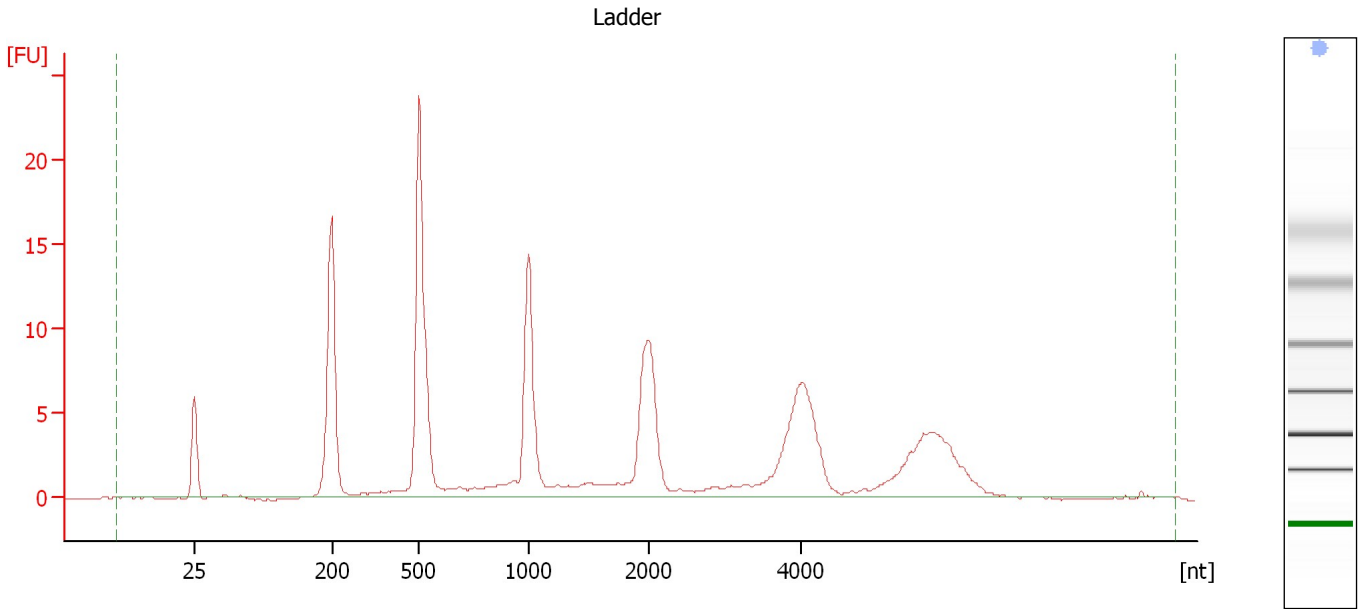
Ladder

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

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary



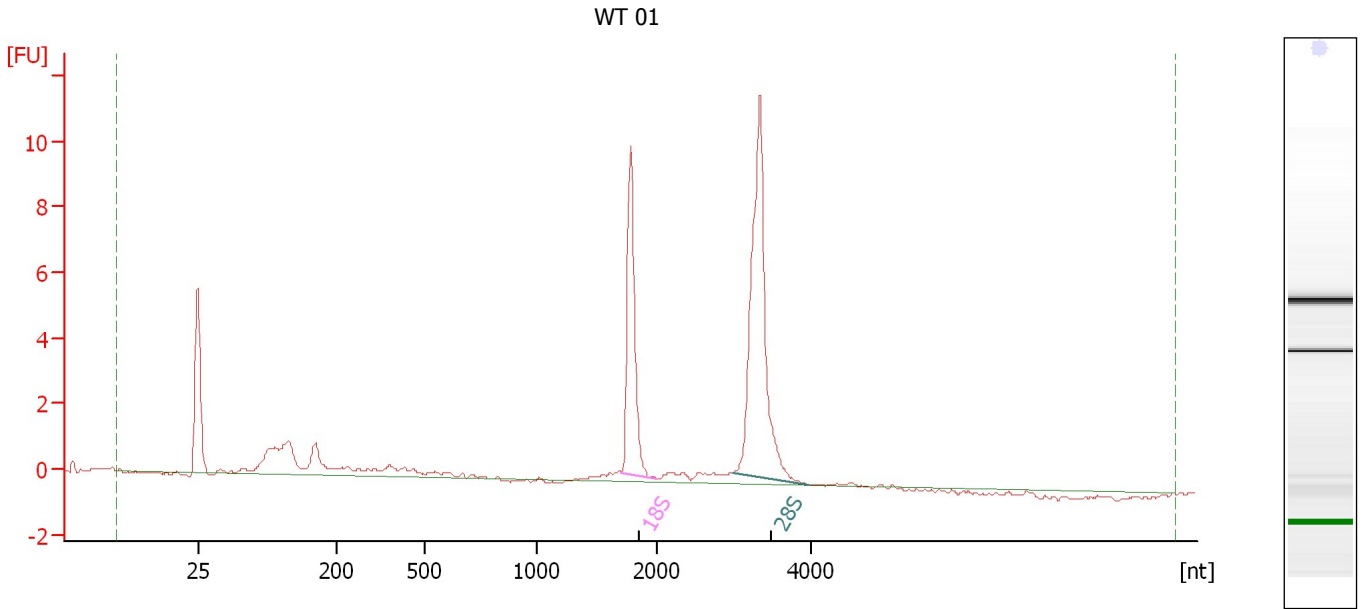
Overall Results for Ladder

RNA Area:	153.9	Result Flagging Color:	
RNA Concentration:	150 ng/μl	Result Flagging Label:	All Other Samples

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WT 01

RNA Area:	42.8	RNA Integrity Number (RIN):	9.2 (B.02.08)
RNA Concentration:	42 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.9	Result Flagging Label:	RIN: 9.20

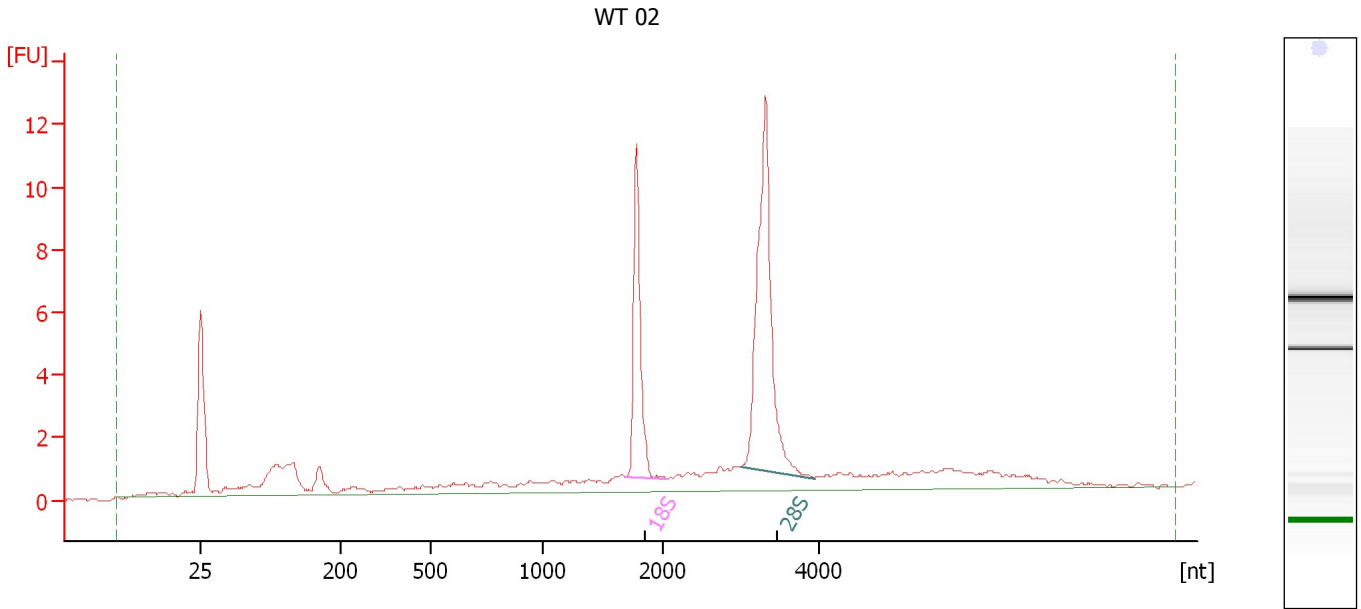
Fragment table for sample 1 : WT 01

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,708	2,018	8.8	20.5
28S	2,982	3,959	17.0	39.7

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WT 02

RNA Area:	67.5	RNA Integrity Number (RIN):	8.5 (B.02.08)
RNA Concentration:	66 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.9	Result Flagging Label:	RIN: 8.50

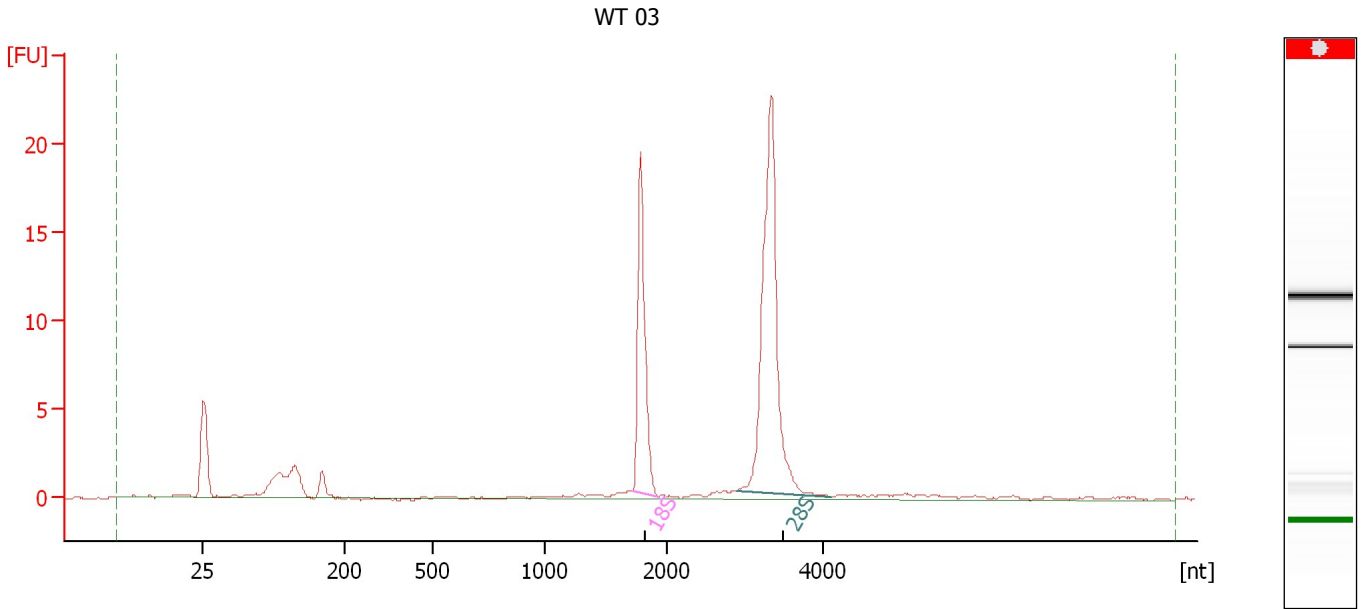
Fragment table for sample 2 : WT 02

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,694	2,062	9.2	13.7
28S	3,006	3,950	17.4	25.8

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : WT 03

RNA Area:	73.4	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	72 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	2.0	Result Flagging Label:	RIN N/A

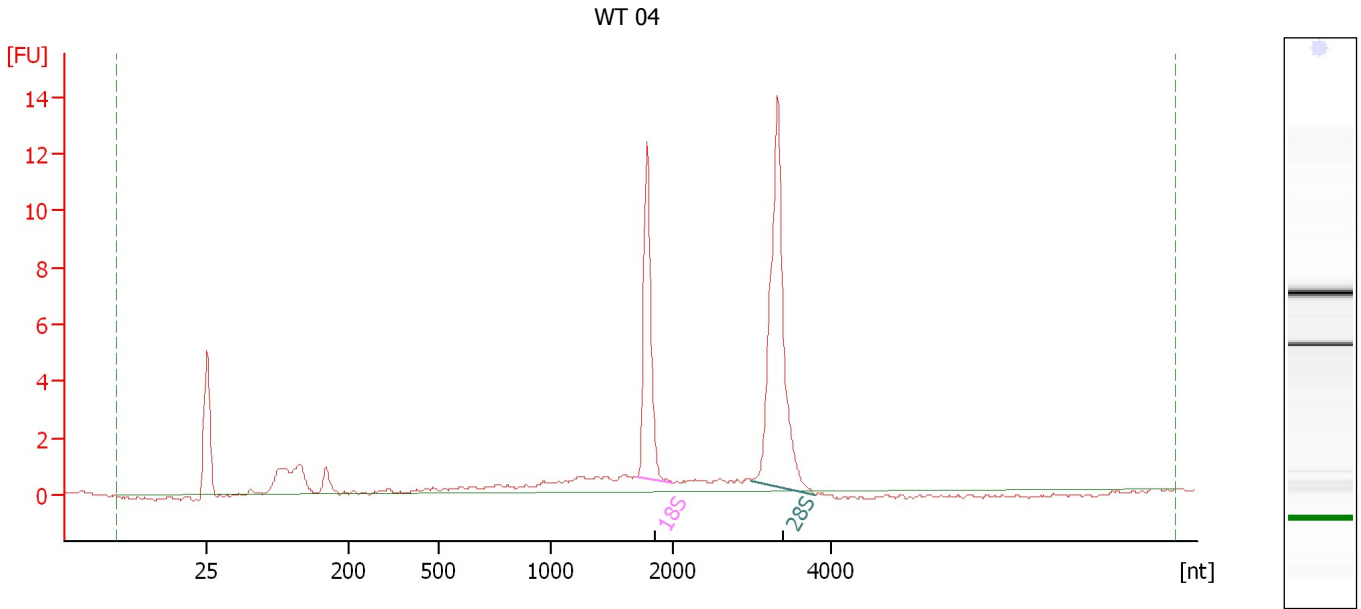
Fragment table for sample 3 : WT 03

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,714	1,935	16.5	22.5
28S	2,895	4,094	33.4	45.5

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : WT 04

RNA Area:	51.2	RNA Integrity Number (RIN):	8.2 (B.02.08)
RNA Concentration:	50 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.9	Result Flagging Label:	RIN: 8.20

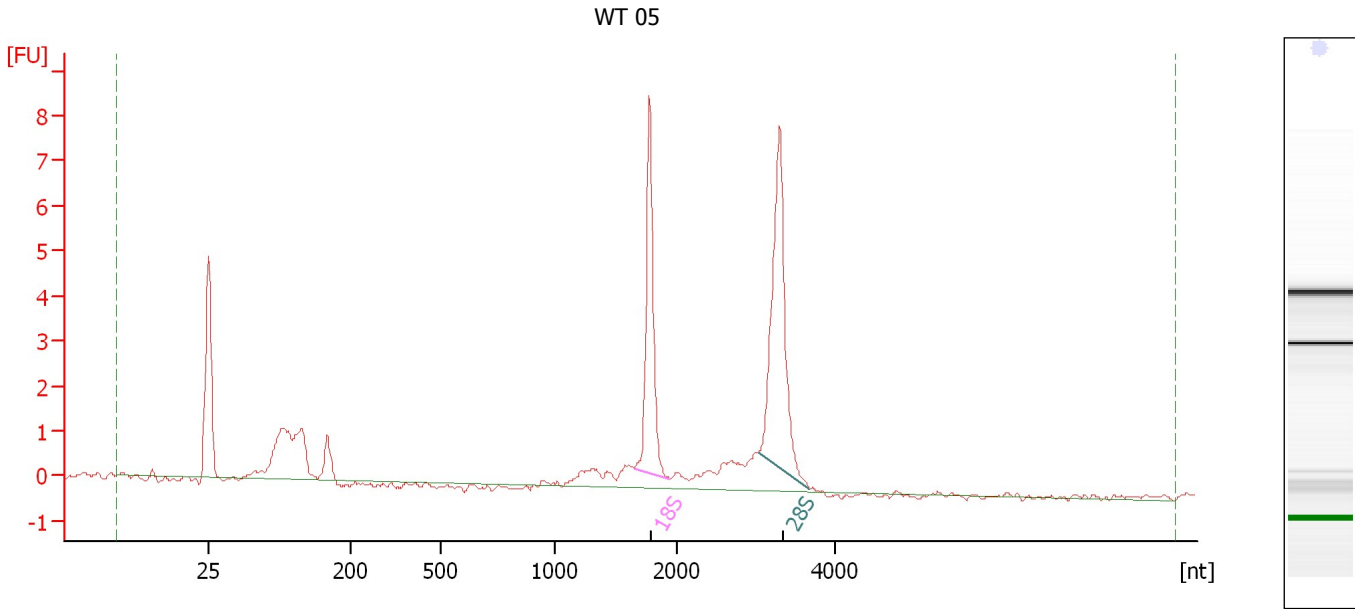
Fragment table for sample 4 : WT 04

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,709	2,013	10.0	19.4
28S	3,001	3,799	18.9	36.9

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : WT 05

RNA Area:	35.4	RNA Integrity Number (RIN):	9.5 (B.02.08)
RNA Concentration:	34 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.4	Result Flagging Label:	RIN: 9.50

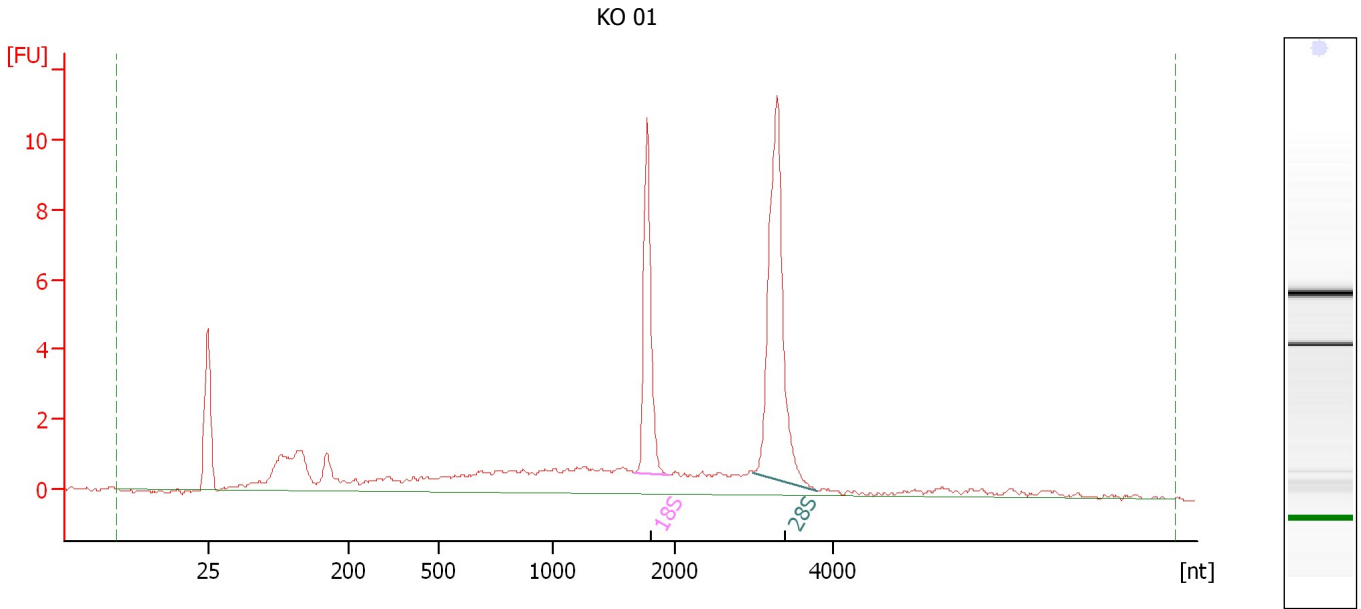
Fragment table for sample 5 : WT 05

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,651	1,939	7.1	20.1
28S	3,026	3,673	10.2	29.0

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : KO 01

RNA Area:	66.6	RNA Integrity Number (RIN):	7.5 (B.02.08)
RNA Concentration:	65 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.9	Result Flagging Label:	RIN: 7.50

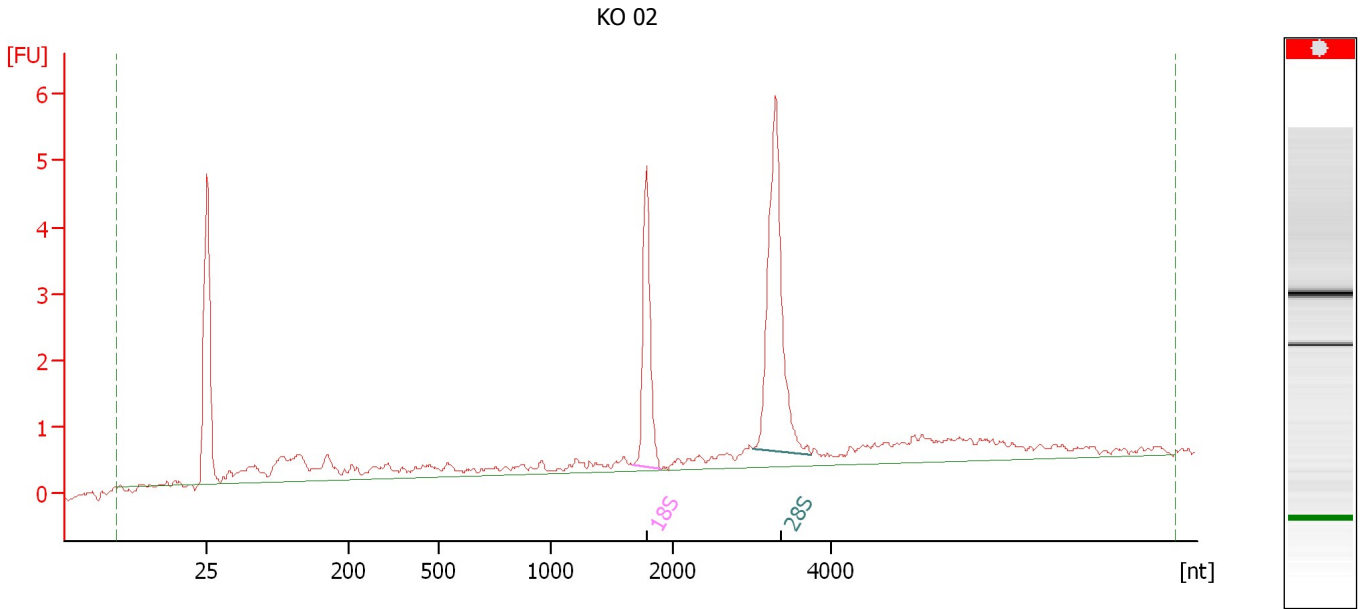
Fragment table for sample 6 : KO 01

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,667	1,947	8.5	12.8
28S	3,000	3,810	16.3	24.4

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : KO 02

RNA Area:	29.8	RNA Integrity Number (RIN):	N/A (B.02.08)
RNA Concentration:	29 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	2.0	Result Flagging Label:	RIN N/A

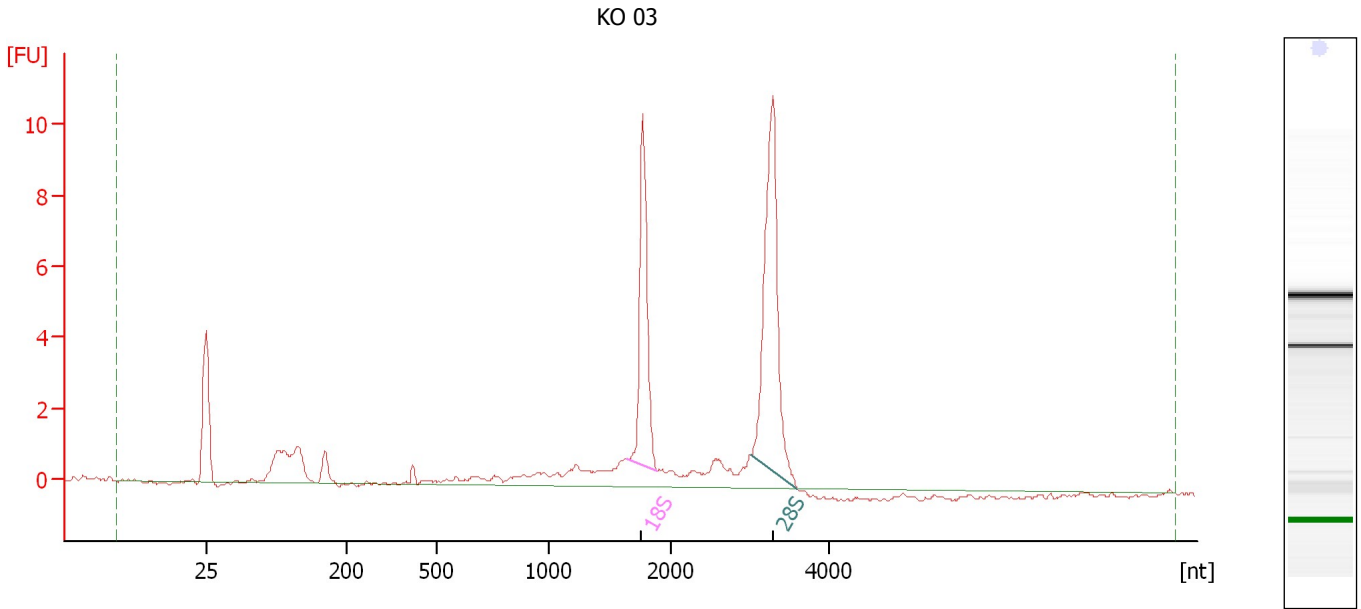
Fragment table for sample 7 : KO 02

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,674	1,903	3.8	12.8
28S	3,014	3,759	7.6	25.3

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : KO 03

RNA Area:	46.4	RNA Integrity Number (RIN):	8 (B.02.08)
RNA Concentration:	45 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.7	Result Flagging Label:	RIN:8

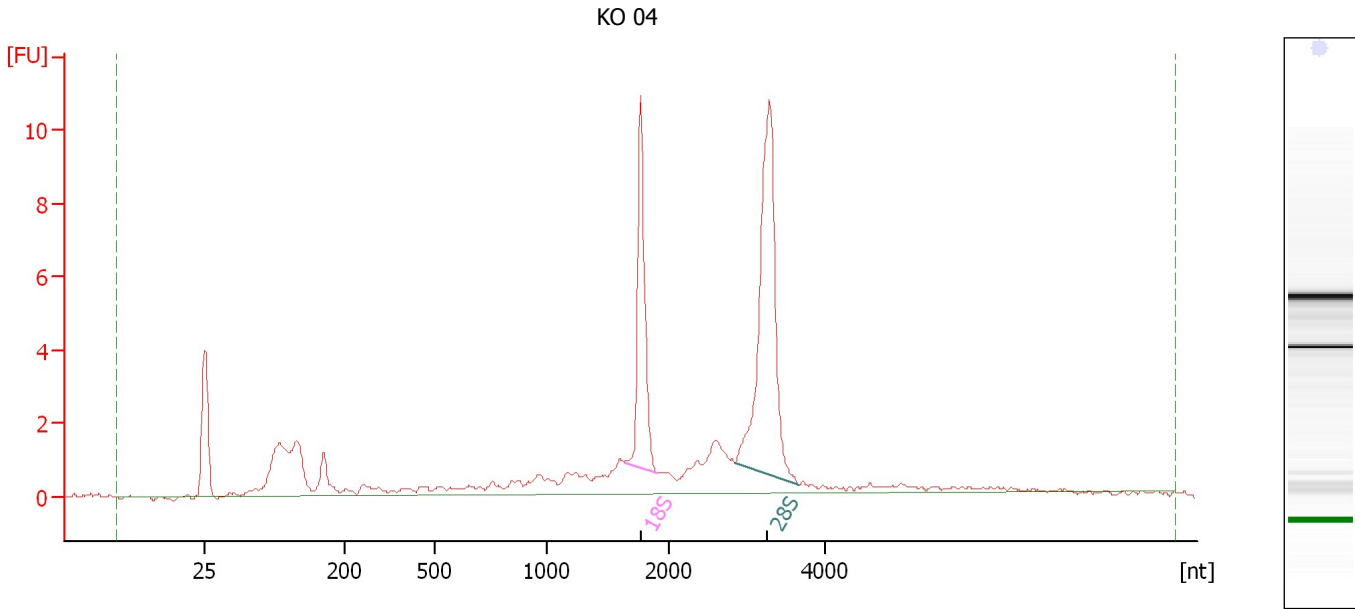
Fragment table for sample 8 : KO 03

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,646	1,893	8.5	18.3
28S	3,029	3,612	14.4	31.1

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : KO 04

RNA Area:	61.4	RNA Integrity Number (RIN):	8.3 (B.02.08)
RNA Concentration:	60 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	2.0	Result Flagging Label:	RIN: 8.30

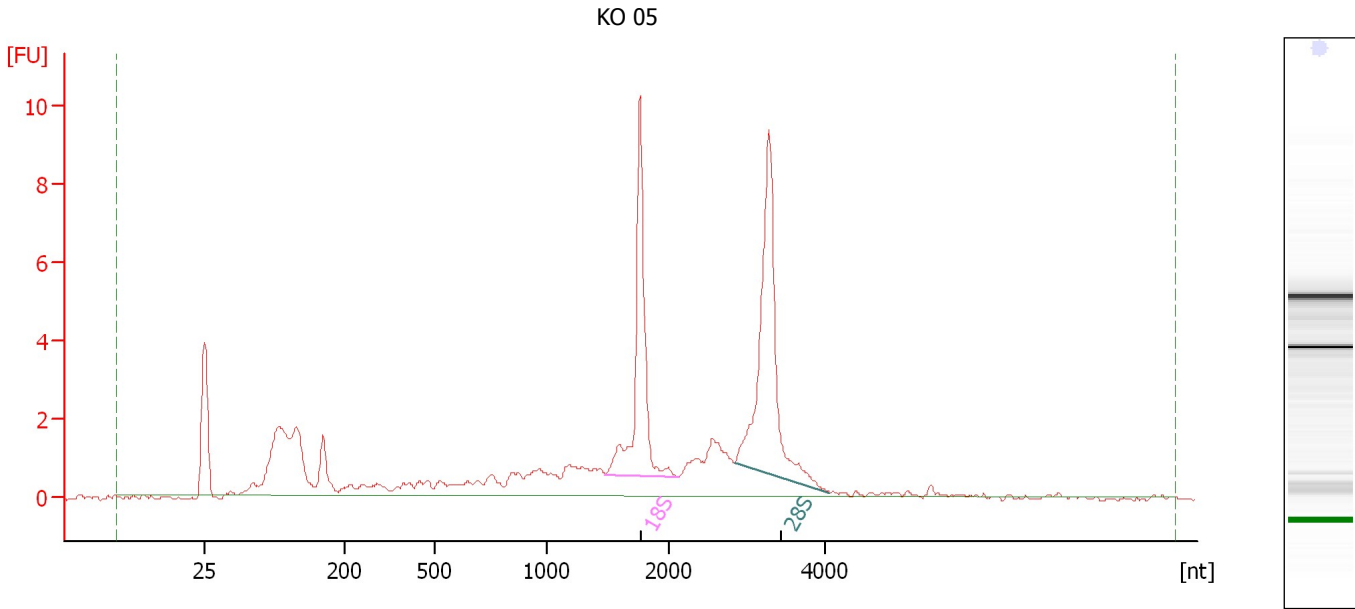
Fragment table for sample 9 : KO 04

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,636	1,910	8.6	14.1
28S	2,840	3,655	17.2	28.0

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : KO 05

RNA Area:	63.9	RNA Integrity Number (RIN):	7.9 (B.02.08)
RNA Concentration:	62 ng/μl	Result Flagging Color:	
rRNA Ratio [28s / 18s]:	1.3	Result Flagging Label:	RIN: 7.90

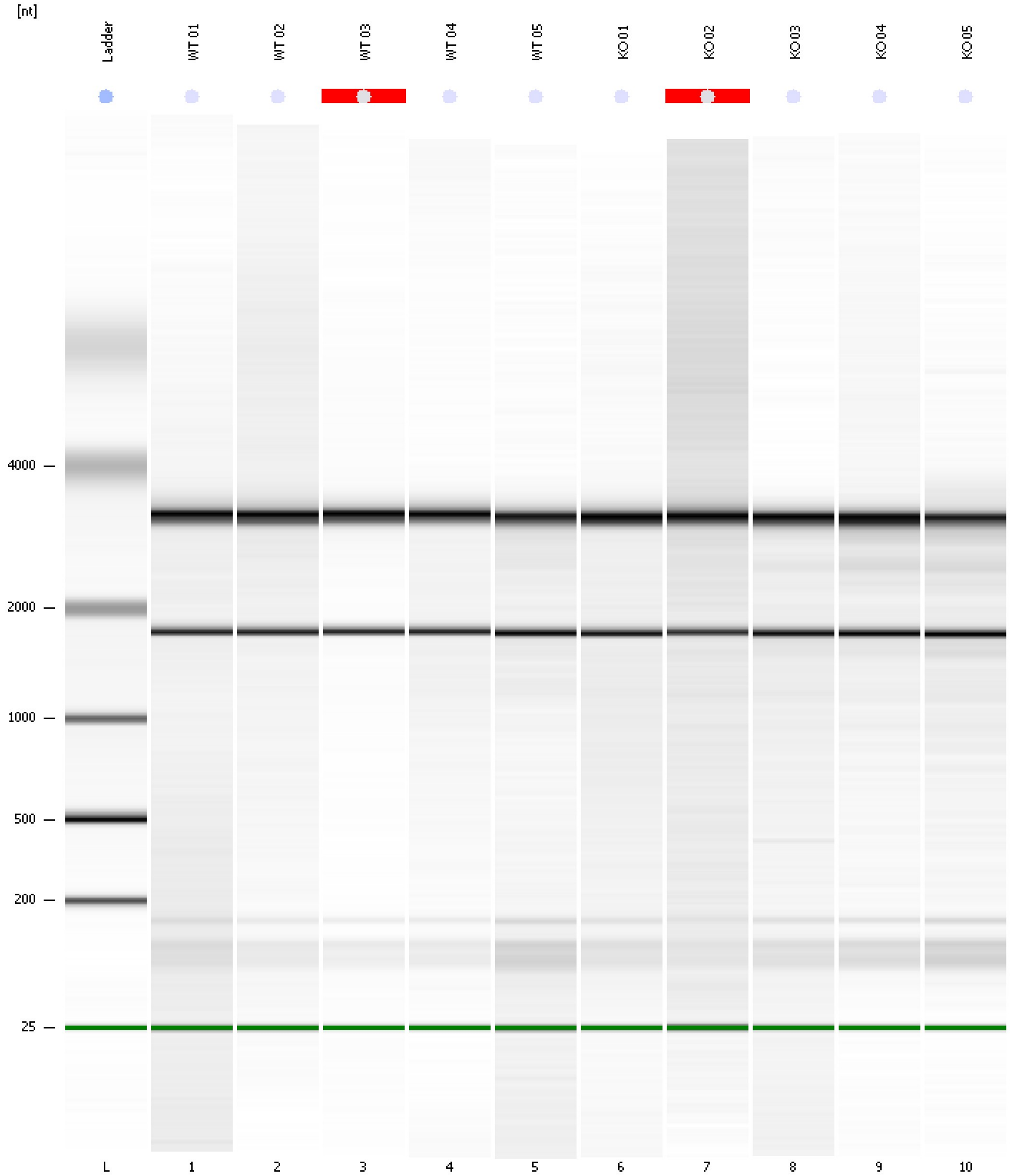
Fragment table for sample 10 : KO 05

Name	Start Size [nt]	End Size [nt]	Area	% of total Area
18S	1,477	2,119	10.4	16.3
28S	2,840	4,050	13.9	21.8

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
Modified: 11/28/2016 12:54:09 PM

Gel Image



Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\... expert\data\2016-11-28\2016-11-28_001_HiSeq_757_RNA_QC.xad

Created: 11/28/2016 11:47:51 AM
 Modified: 11/28/2016 12:54:09 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		11/28/2016 12:11:38 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\2016-11-28\2016-11-28_001.xad)		Instrument	Run		11/28/2016 11:47:56 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/28/2016 11:47:56 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/28/2016 11:47:56 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/28/2016 11:47:56 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/28/2016 11:47:56 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/28/2016 11:47:56 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/28/2016 11:47:56 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1