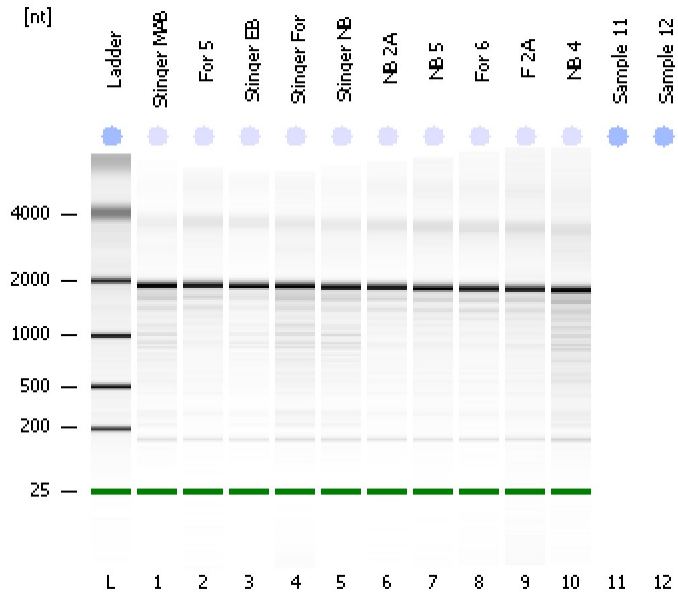


Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
 Modified: 3/5/2012 4:19:44 PM

Electrophoresis File Run Summary



Instrument Information:

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

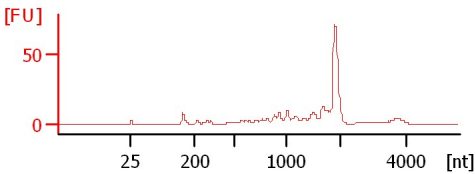
Assay Information:

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.

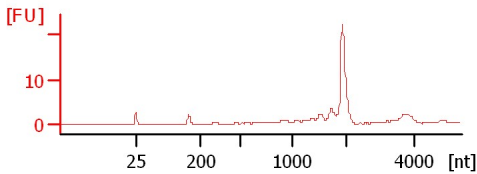
Chip Information:

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

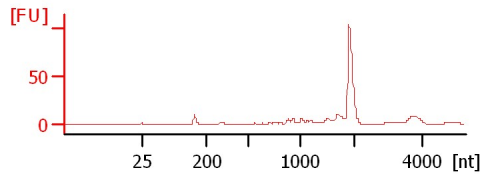
Stinger MAB
 RIN: 2.50



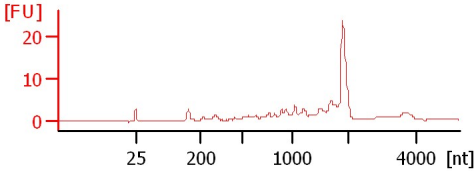
For 5
 RIN: 3.50



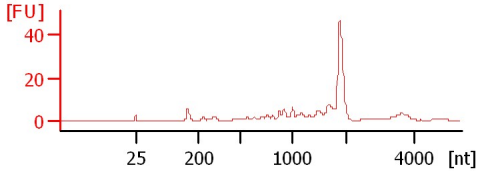
Stinger EB
 RIN: 7.10



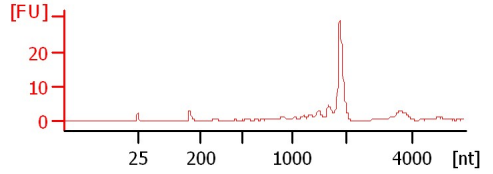
Stinger For
 RIN: 2.70



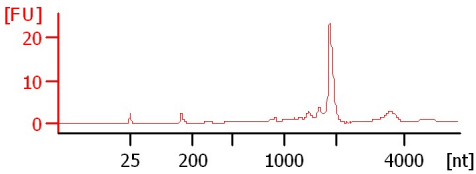
Stinger NB
 RIN: 2.50



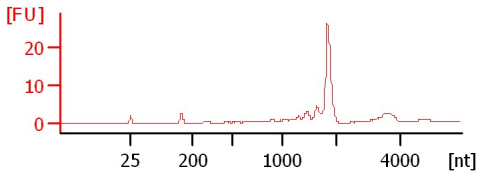
NB 2A
 RIN: 2.60



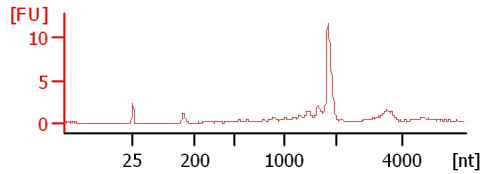
NB 5
 RIN: 3.10



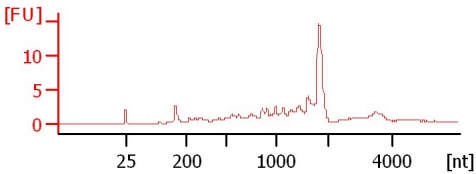
For 6
 RIN: 3.20



F 2A
 RIN: 3.20



NB 4
 RIN: 5.90



Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|-------------|----------------|--------|-------------------|--------------|
| Stinger MAB | | ✓ | RIN: 2.50 | |
| For 5 | | ✓ | RIN: 3.50 | |
| Stinger EB | | ✓ | RIN: 7.10 | |
| Stinger For | | ✓ | RIN: 2.70 | |
| Stinger NB | | ✓ | RIN: 2.50 | |
| NB 2A | | ✓ | RIN: 2.60 | |
| NB 5 | | ✓ | RIN: 3.10 | |
| For 6 | | ✓ | RIN: 3.20 | |
| F 2A | | ✓ | RIN: 3.20 | |
| NB 4 | | ✓ | RIN: 5.90 | |
| Sample 11 | | | | |
| Sample 12 | | | | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 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

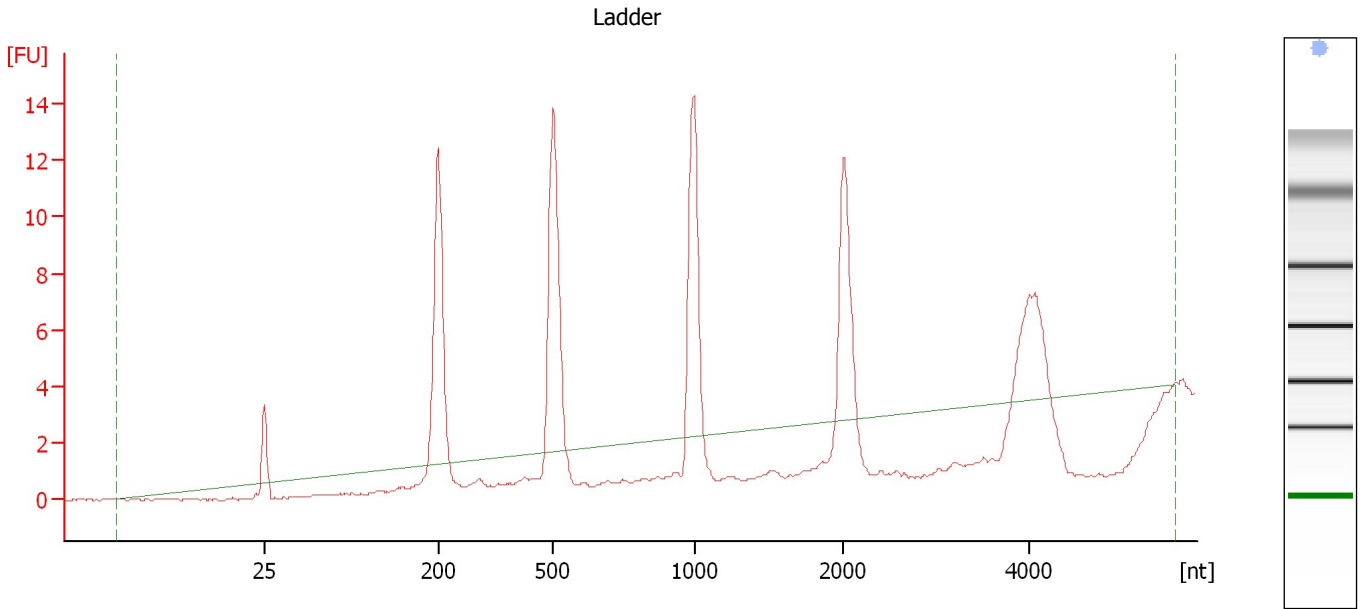
Ladder

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

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary



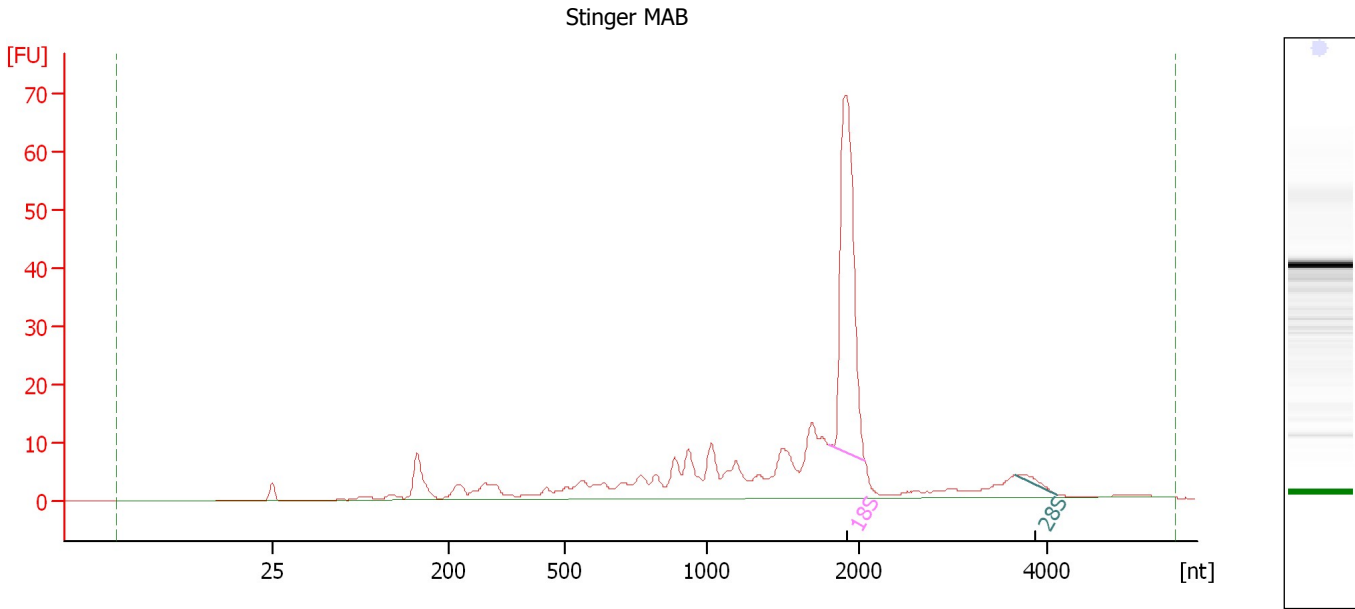
Overall Results for Ladder

| | | | |
|--------------------|-----------|------------------------|---|
| RNA Area: | 58.8 | Result Flagging Color: | |
| RNA Concentration: | 150 ng/μl | Result Flagging Label: | All Other Samples |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Stinger MAB

RNA Area: 298.7 RNA Integrity Number (RIN): 2.5 (B.02.08)
RNA Concentration: 762 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.0 Result Flagging Label: RIN: 2.50

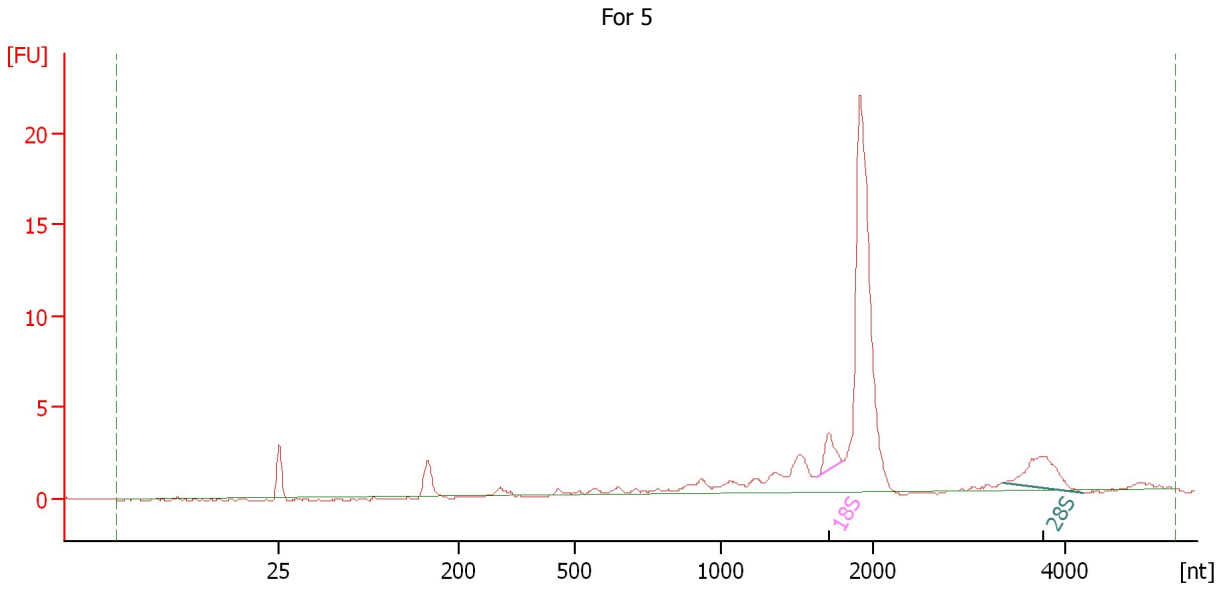
Fragment table for sample 1 : Stinger MAB

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,798 | 2,066 | 82.9 | 27.8 |
| 28S | 3,654 | 4,096 | 1.6 | 0.5 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
 Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : For 5

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 60.2 | RNA Integrity Number (RIN): | 3.5 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 154 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 2.4 | Result Flagging Label: | RIN: 3.50 |

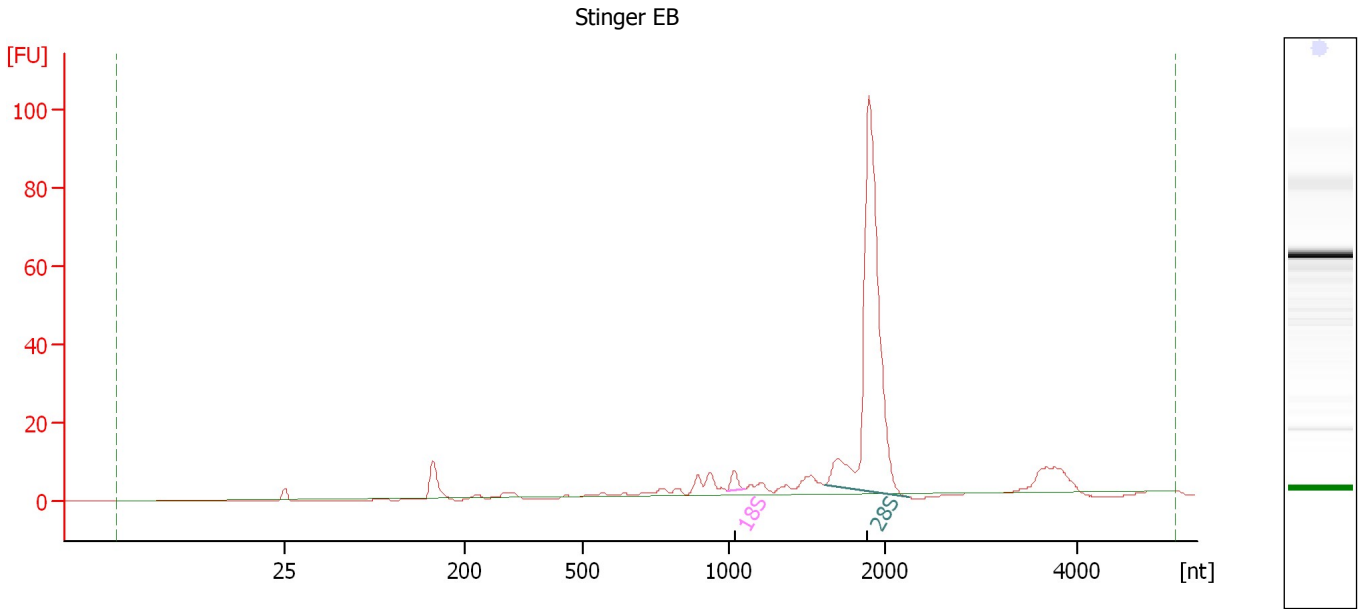
Fragment table for sample 2 : For 5

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,635 | 1,795 | 2.0 | 3.3 |
| 28S | 3,350 | 4,201 | 4.8 | 8.0 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Stinger EB

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 236.9 | RNA Integrity Number (RIN): | 7.1 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 605 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 38.6 | Result Flagging Label: | RIN: 7.10 |

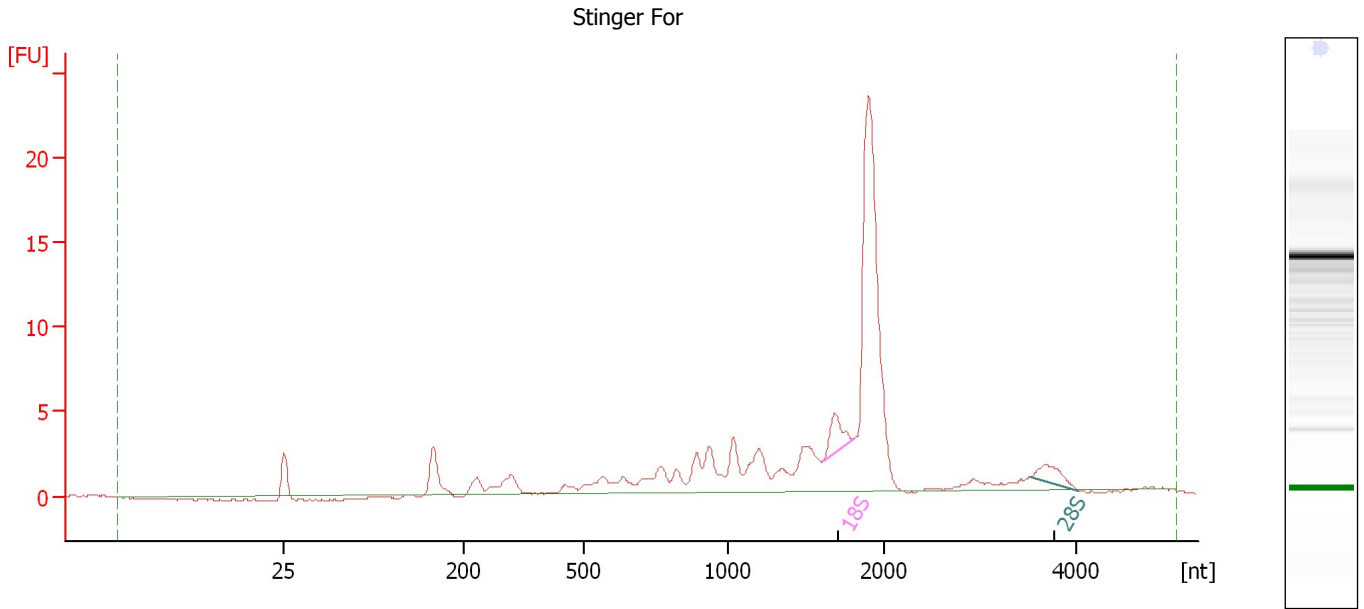
Fragment table for sample 3 : Stinger EB

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 987 | 1,093 | 3.9 | 1.7 |
| 28S | 1,610 | 2,260 | 151.2 | 63.8 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Stinger For

RNA Area: 91.8 RNA Integrity Number (RIN): 2.7 (B.02.08)
RNA Concentration: 234 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.8 Result Flagging Label: RIN: 2.70

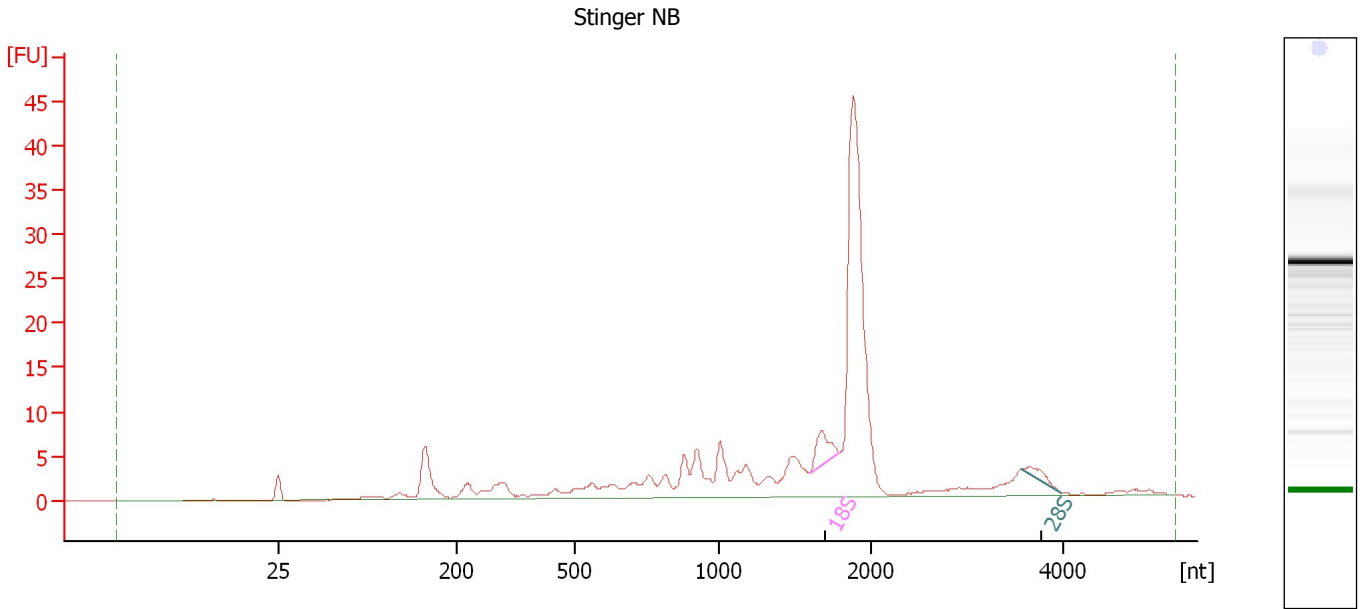
Fragment table for sample 4 : Stinger For

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,609 | 1,803 | 2.7 | 2.9 |
| 28S | 3,528 | 4,017 | 2.1 | 2.2 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Stinger NB

RNA Area: 178.9 RNA Integrity Number (RIN): 2.5 (B.02.08)
RNA Concentration: 457 ng/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 0.3 Result Flagging Label: RIN: 2.50

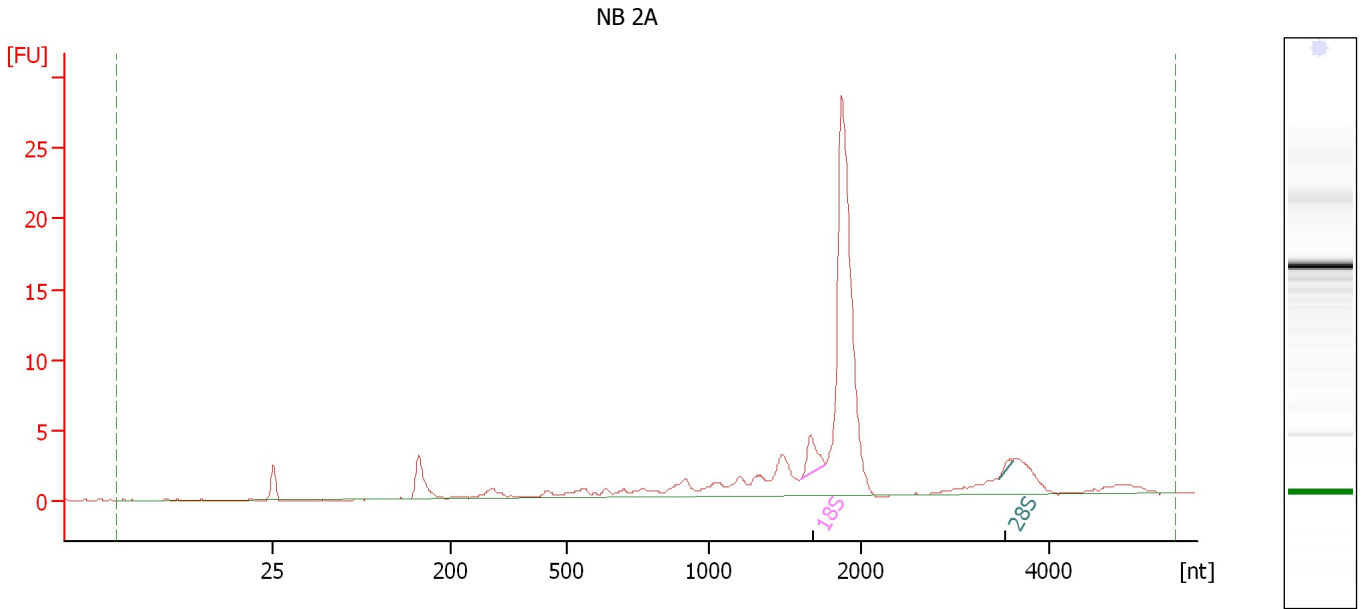
Fragment table for sample 5 : Stinger NB

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,600 | 1,788 | 5.1 | 2.9 |
| 28S | 3,577 | 3,981 | 1.7 | 0.9 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : NB 2A

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 85.4 | RNA Integrity Number (RIN): | 2.6 (B.02.08) |
| RNA Concentration: | 218 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.1 | Result Flagging Label: | RIN: 2.60 |

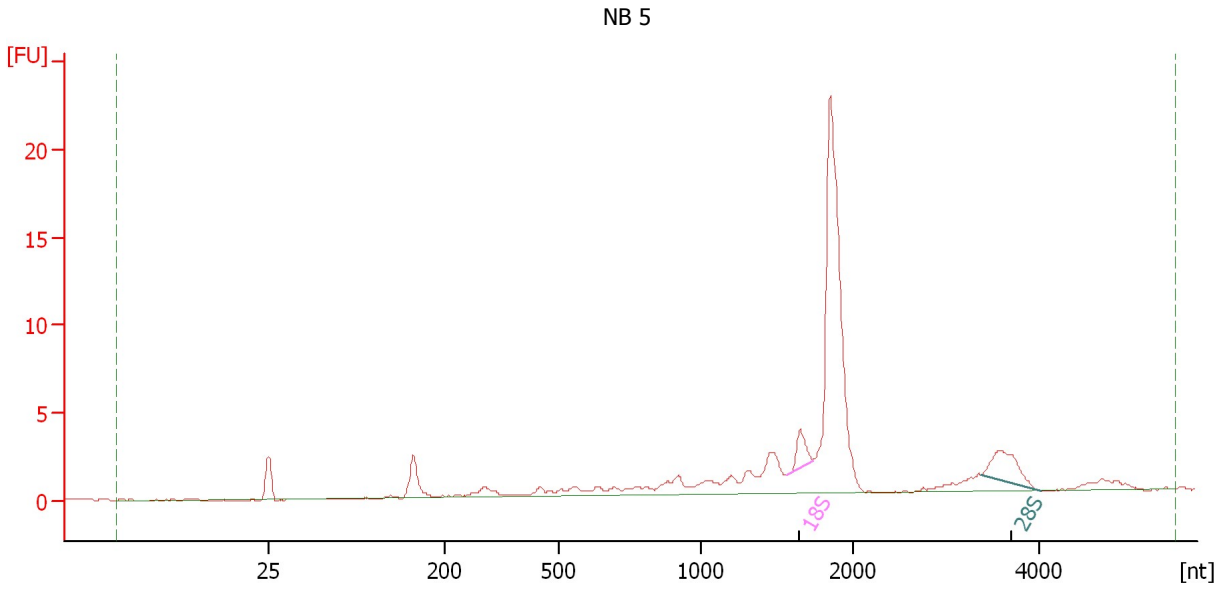
Fragment table for sample 6 : NB 2A

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,604 | 1,766 | 2.8 | 3.2 |
| 28S | 3,458 | 3,605 | 0.2 | 0.3 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
 Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : NB 5

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 72.0 | RNA Integrity Number (RIN): | 3.1 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 184 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 2.1 | Result Flagging Label: | RIN: 3.10 |

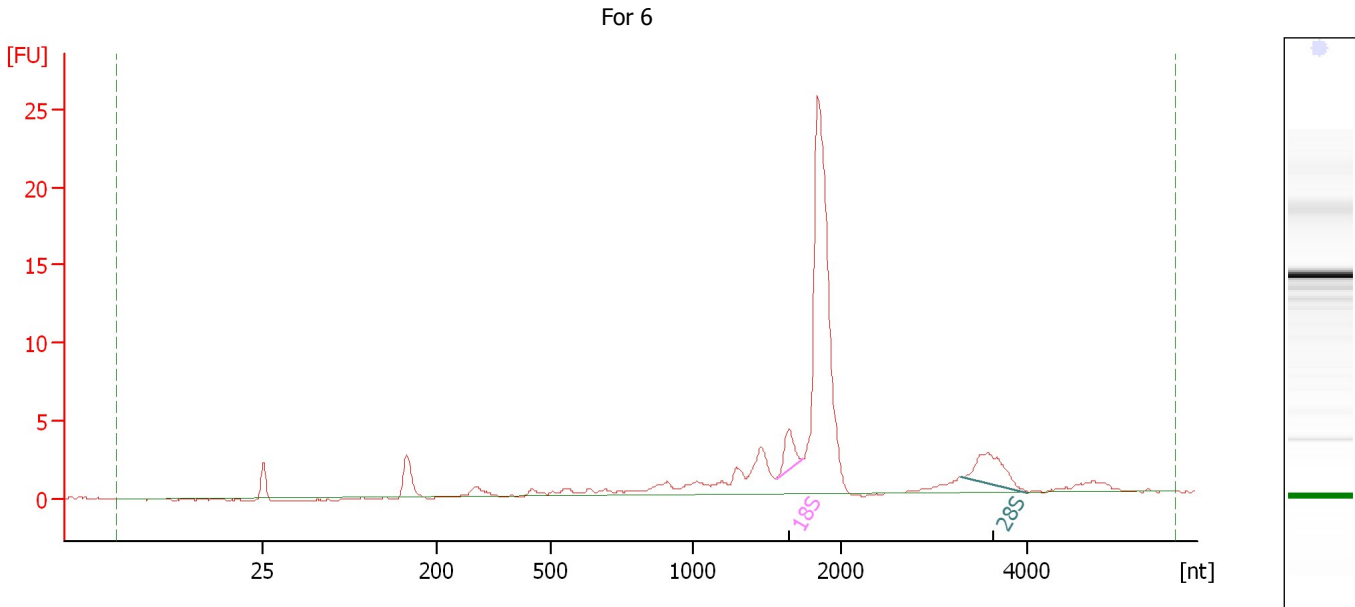
Fragment table for sample 7 : NB 5

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,566 | 1,736 | 1.9 | 2.6 |
| 28S | 3,379 | 4,017 | 4.0 | 5.6 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : For 6

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 77.6 | RNA Integrity Number (RIN): | 3.2 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 198 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 1.9 | Result Flagging Label: | RIN: 3.20 |

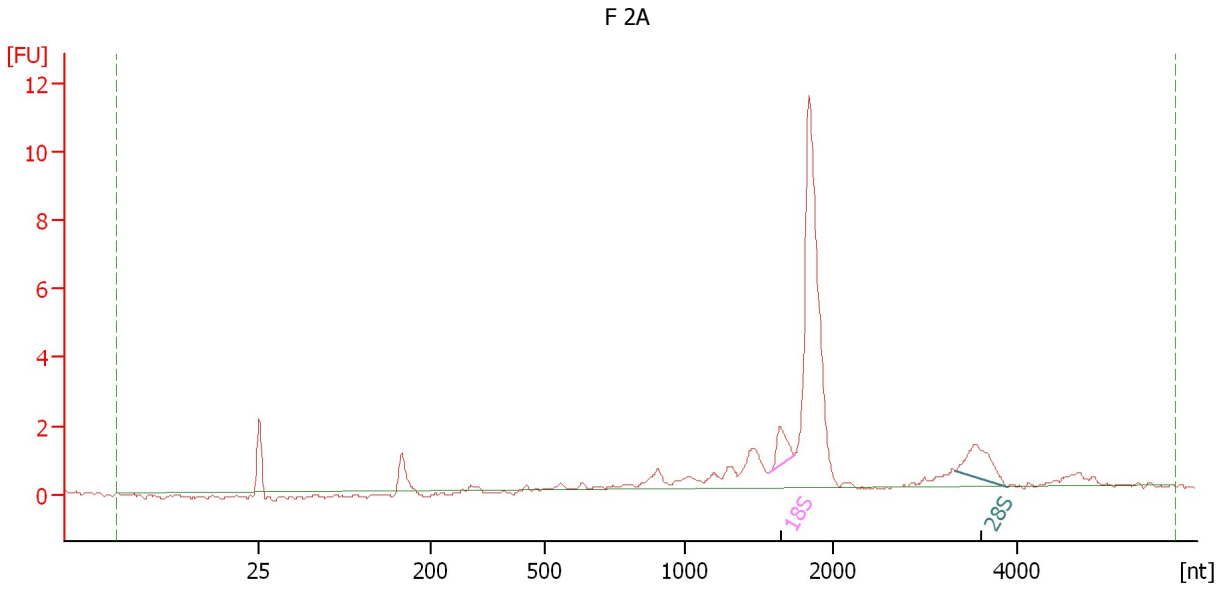
Fragment table for sample 8 : For 6

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,563 | 1,742 | 2.5 | 3.3 |
| 28S | 3,290 | 4,004 | 4.9 | 6.3 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : F 2A

| | | | |
|-------------------------|----------|-----------------------------|---|
| RNA Area: | 33.3 | RNA Integrity Number (RIN): | 3.2 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 85 ng/μl | | |
| rRNA Ratio [28s / 18s]: | 1.7 | Result Flagging Color: | |
| | | Result Flagging Label: | RIN: 3.20 |

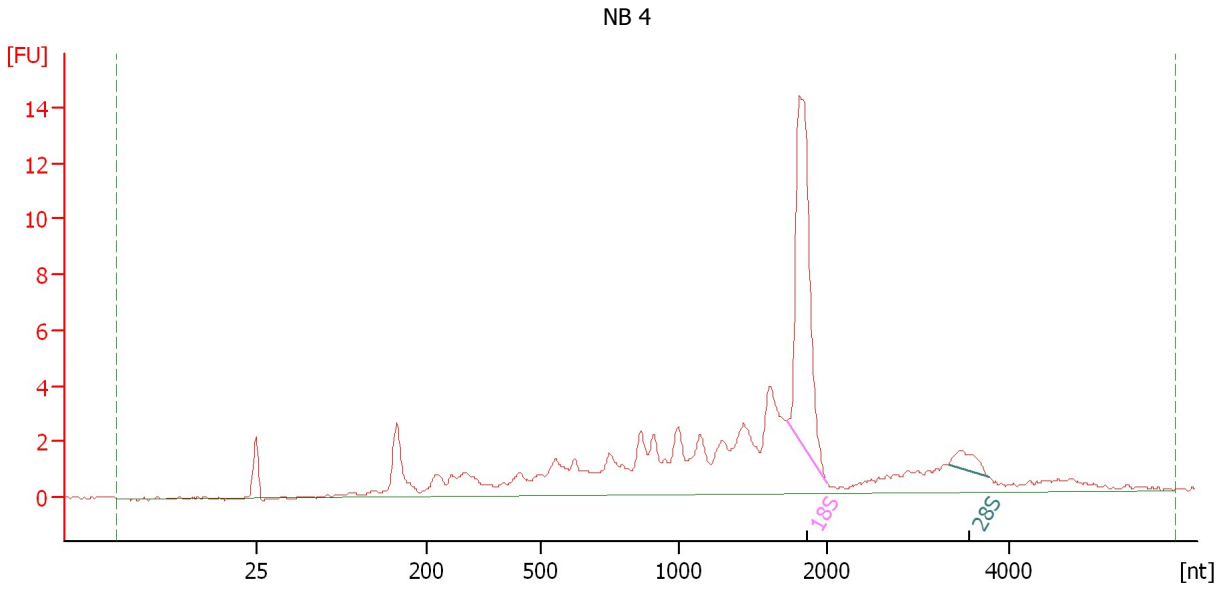
Fragment table for sample 9 : F 2A

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,575 | 1,741 | 1.2 | 3.6 |
| 28S | 3,336 | 3,893 | 2.0 | 6.1 |

Assay Class: Eukaryote Total RNA Nano
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
 Modified: 3/5/2012 4:19:44 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : NB 4

| | | | |
|-------------------------|-----------|-----------------------------|---|
| RNA Area: | 88.3 | RNA Integrity Number (RIN): | 5.9 (B.02.08, Anomaly Threshold(s) manually adapted) |
| RNA Concentration: | 225 ng/μl | Result Flagging Color: | |
| rRNA Ratio [28s / 18s]: | 0.1 | Result Flagging Label: | RIN: 5.90 |

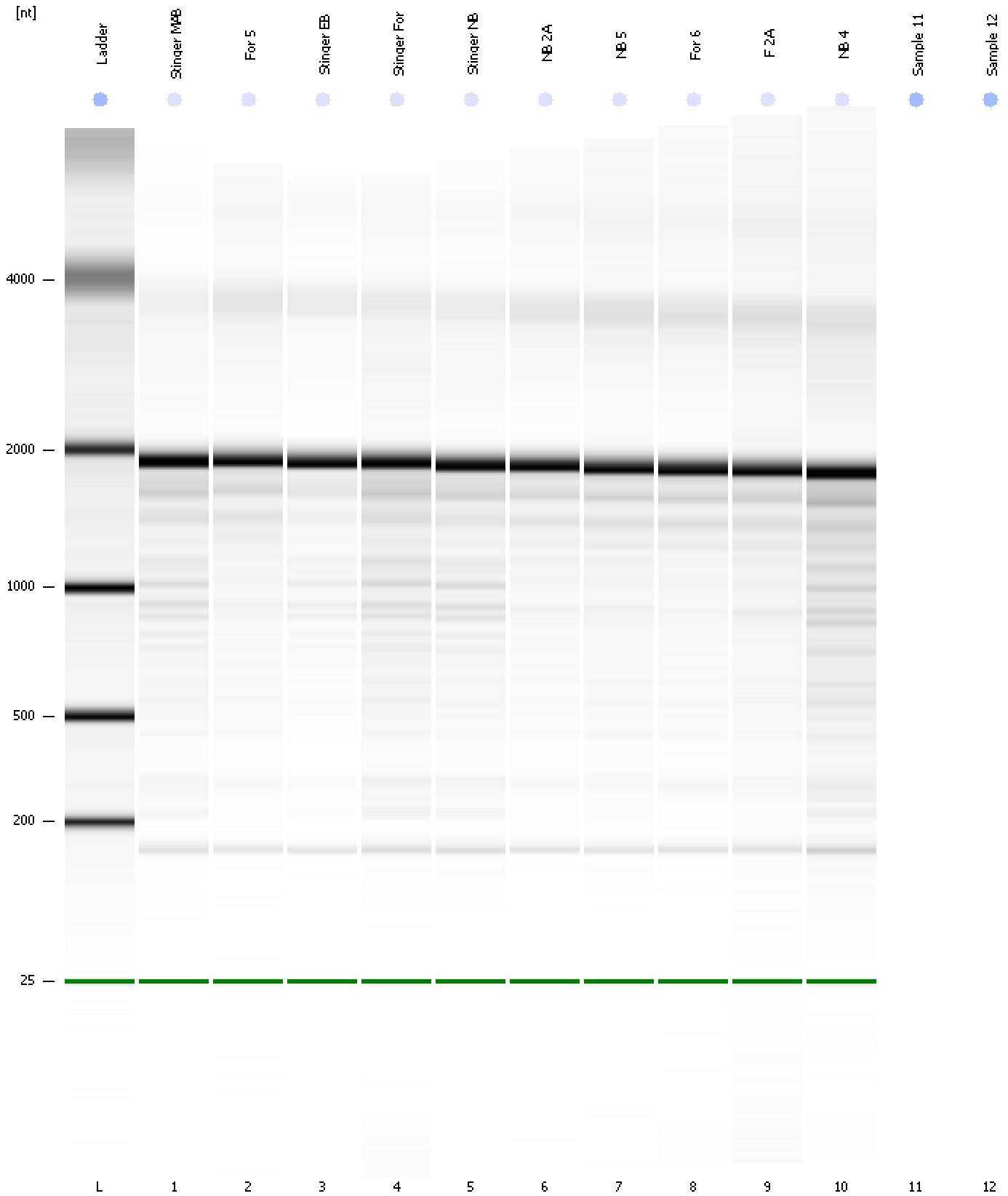
Fragment table for sample 10 : NB 4

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,733 | 2,014 | 18.0 | 20.4 |
| 28S | 3,332 | 3,788 | 1.4 | 1.5 |

Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Gel Image

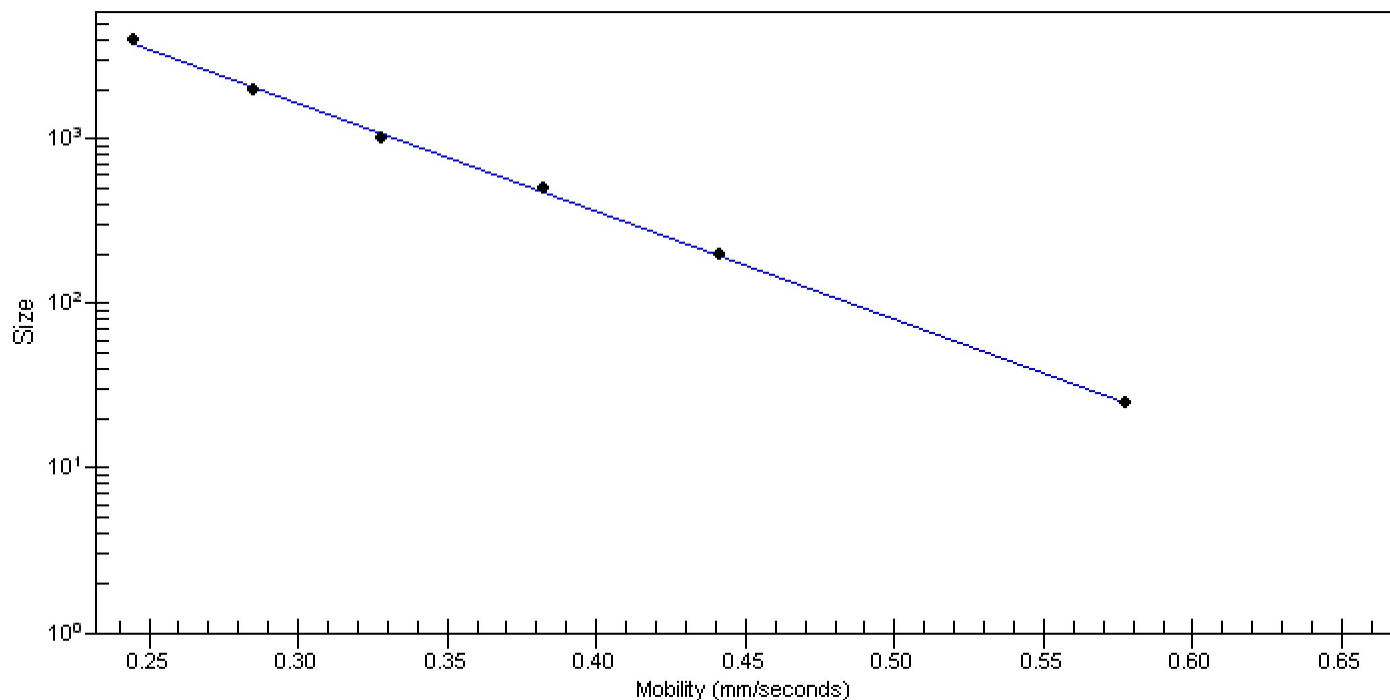


Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Curves

Standard Curve



Assay Class: Eukaryote Total RNA Nano
Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad

Created: 3/5/2012 3:48:42 PM
Modified: 3/5/2012 4:19:44 PM

Invalid Samples

Sample 11 has not been run, no results available.

Sample 12 has not been run, no results available.

Assay Class: Eukaryote Total RNA Nano Created: 3/5/2012 3:48:42 PM
 Data Path: C:\...ents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad Modified: 3/5/2012 4:19:44 PM

Run Logbook

| Description | Number | Source | Category | Sub Category | Time | Time Zone | User | Host |
|---|--------|------------|----------|--------------|---------------------|-------------------------------------|----------|----------|
| Run ended on port 1 (Number of wells acquired: 11) | | Instrument | Run | | 3/5/2012 4:09:45 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-03-05\2012-03-05_005.xad) | | Instrument | Run | | 3/5/2012 3:48:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 3/5/2012 3:48:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 3/5/2012 3:48:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 3/5/2012 3:48:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 3/5/2012 3:48:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 3/5/2012 3:48:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 3/5/2012 3:48:47 PM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |