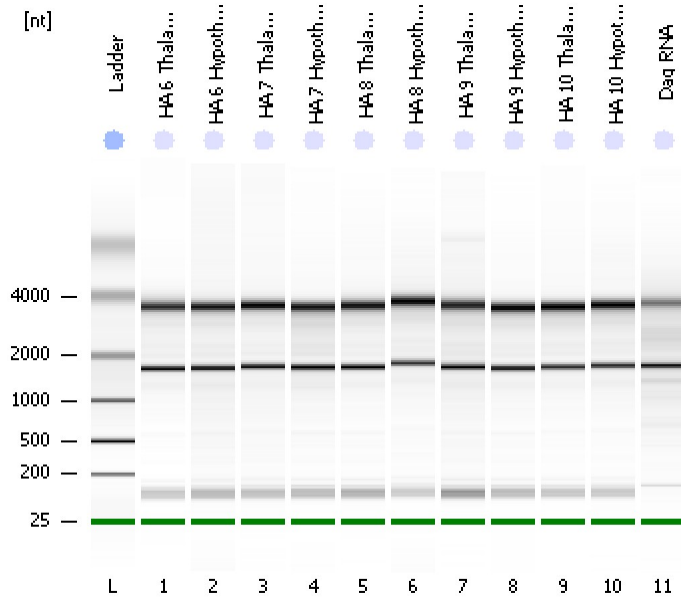


Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electrophoresis File Run Summary



Instrument Information:

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

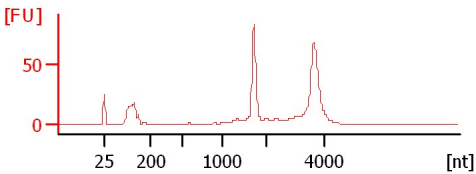
Assay Information:

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.

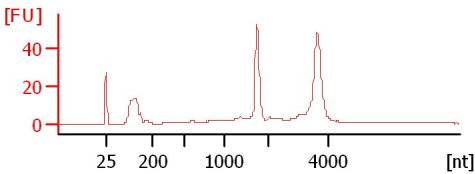
Chip Information:

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

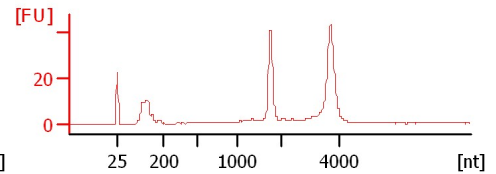
HA 6 Thalamus
RIN: 9.50



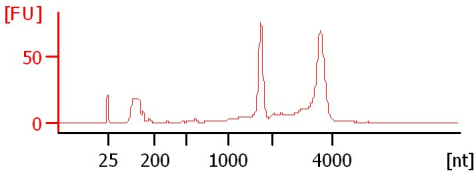
HA 6 Hypothalamus
RIN: 9.10



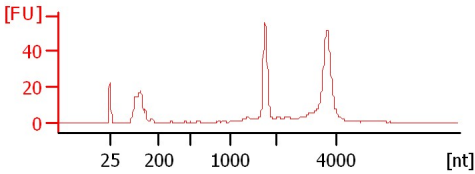
HA 7 Thalamus
RIN: 9.60



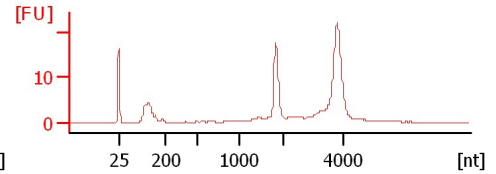
HA 7 Hypothalamus
RIN: 9



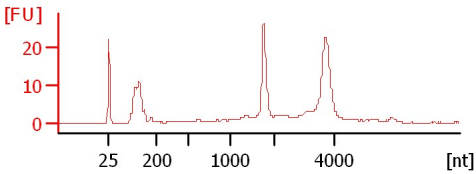
HA 8 Thalamus
RIN: 9.40



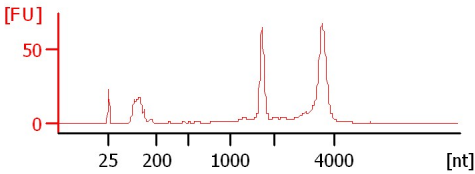
HA 8 Hypothalamus
RIN: 9.50



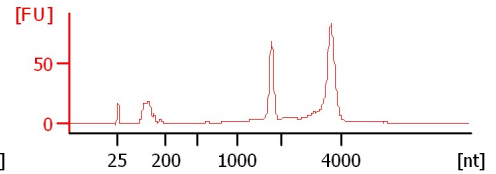
HA 9 Thalamus
RIN: 9.20



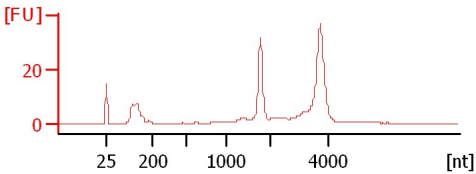
HA 9 Hypothalamus
RIN: 9.60



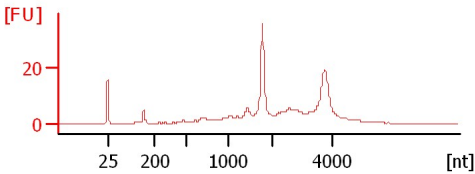
HA 10 Thalamus
RIN: 9.70



HA 10 Hypothalamus
RIN: 9.50



Dag RNA
RIN: 7.80



Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
 Modified: 11/7/2016 12:11:20 PM

Electrophoresis File Run Summary (Chip Summary)

| Sample Name | Sample Comment | Status | Result Label | Result Color |
|--------------------|----------------|--------|-------------------|--------------|
| HA 6 Thalamus | | ✓ | RIN: 9.50 | |
| HA 6 Hypothalamus | | ✓ | RIN: 9.10 | |
| HA 7 Thalamus | | ✓ | RIN: 9.60 | |
| HA 7 Hypothalamus | | ✓ | RIN:9 | |
| HA 8 Thalamus | | ✓ | RIN: 9.40 | |
| HA 8 Hypothalamus | | ✓ | RIN: 9.50 | |
| HA 9 Thalamus | | ✓ | RIN: 9.20 | |
| HA 9 Hypothalamus | | ✓ | RIN: 9.60 | |
| HA 10 Thalamus | | ✓ | RIN: 9.70 | |
| HA 10 Hypothalamus | | ✓ | RIN: 9.50 | |
| Dag RNA | | ✓ | RIN: 7.80 | |
| Ladder | | ✓ | All Other Samples | |

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 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/μl] : 1000
Lower Marker Concentration [pg/μl] : 0
Upper Marker Concentration [pg/μl] : 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

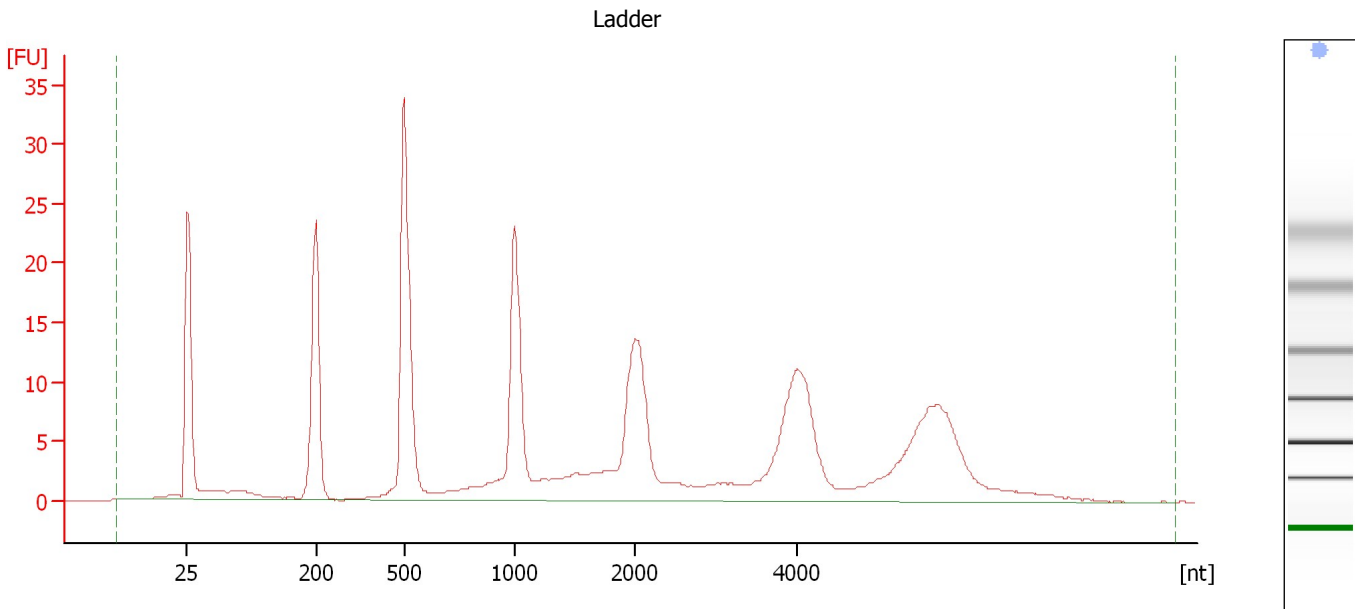
Ladder

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

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary



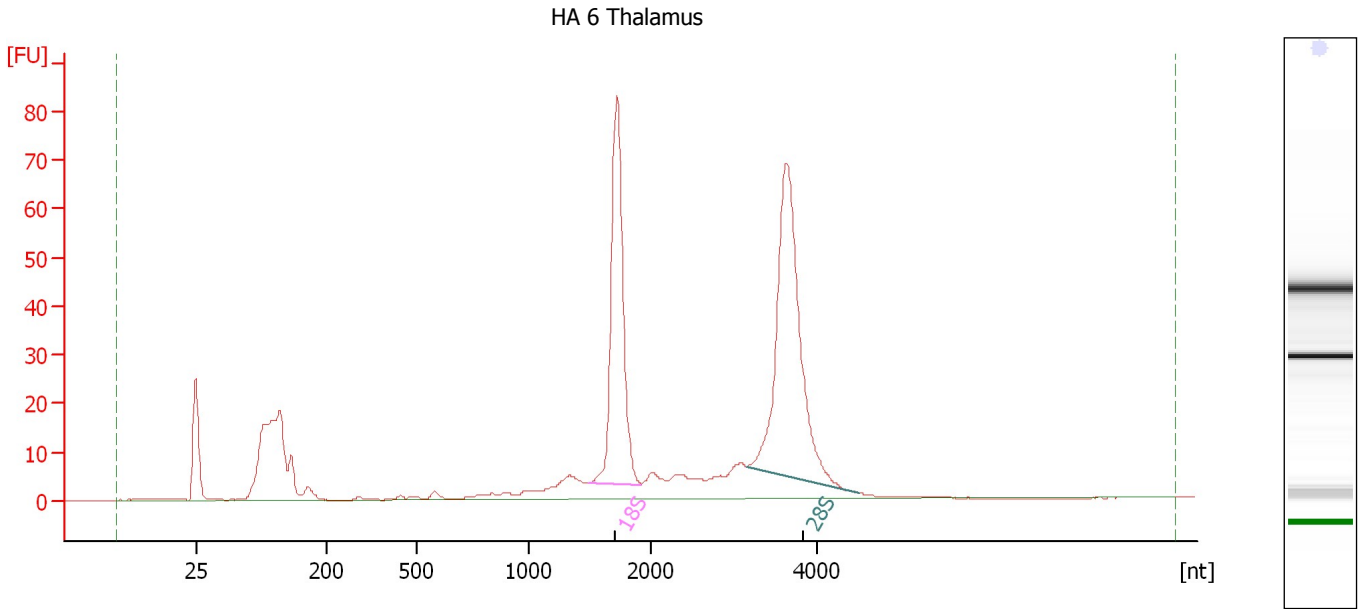
Overall Results for Ladder

| | | | |
|--------------------|-------------|------------------------|---|
| RNA Area: | 299.2 | Result Flagging Color: | |
| RNA Concentration: | 1,000 pg/μl | Result Flagging Label: | All Other Samples |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : HA 6 Thalamus

RNA Area: 511.8 RNA Integrity Number (RIN): 9.5 (B.02.08)
RNA Concentration: 1,710 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.4 Result Flagging Label: RIN: 9.50

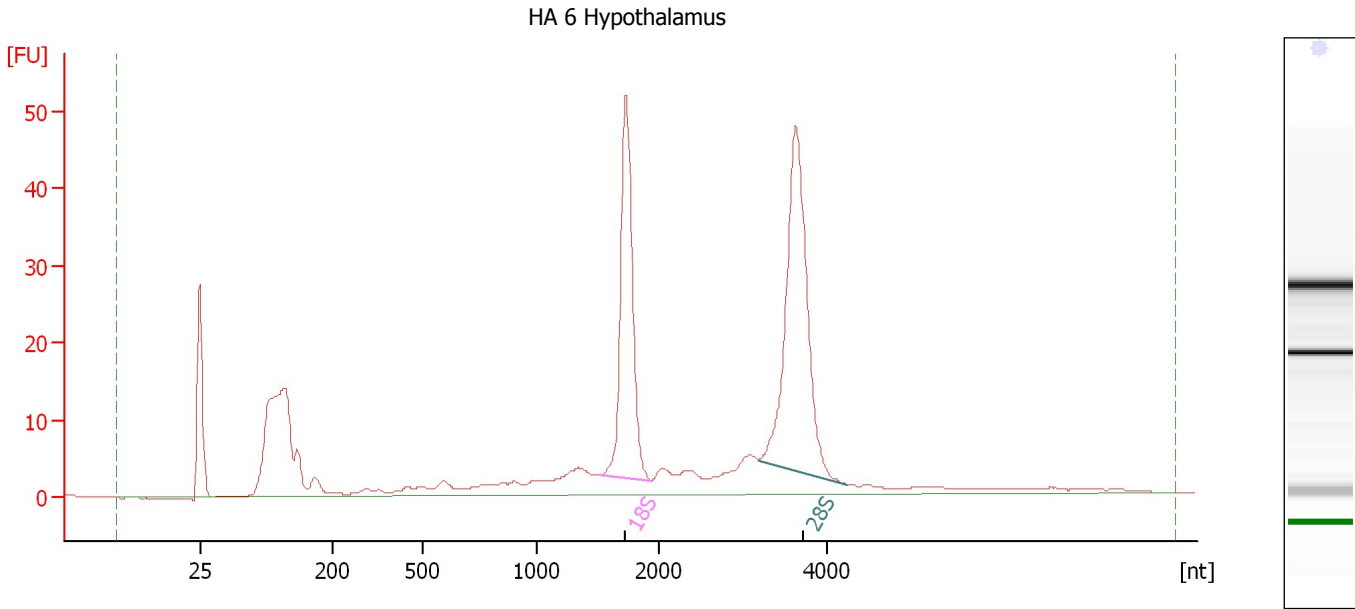
Fragment table for sample 1 : HA 6 Thalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,492 | 1,918 | 116.0 | 22.7 |
| 28S | 3,146 | 4,504 | 157.2 | 30.7 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : HA 6 Hypothalamus

RNA Area: 378.4 RNA Integrity Number (RIN): 9.1 (B.02.08)
RNA Concentration: 1,265 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.4 Result Flagging Label: RIN: 9.10

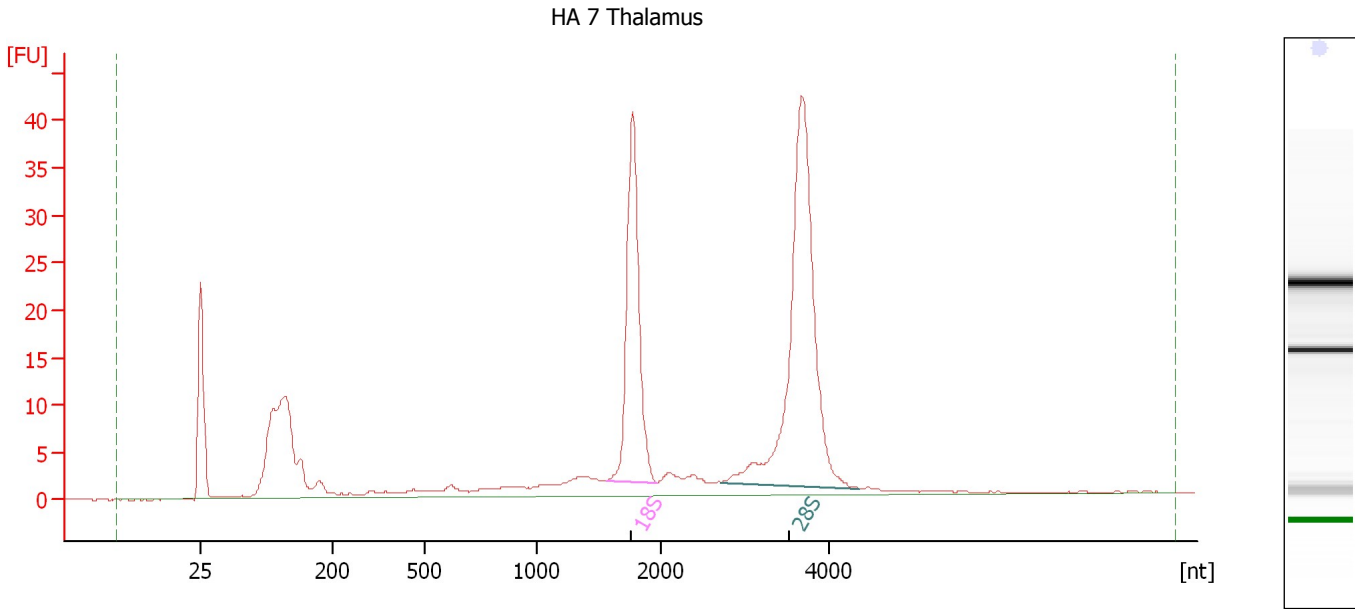
Fragment table for sample 2 : HA 6 Hypothalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,508 | 1,930 | 72.5 | 19.2 |
| 28S | 3,179 | 4,243 | 98.3 | 26.0 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : HA 7 Thalamus

RNA Area: 288.0 RNA Integrity Number (RIN): 9.6 (B.02.08)
RNA Concentration: 963 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN: 9.60

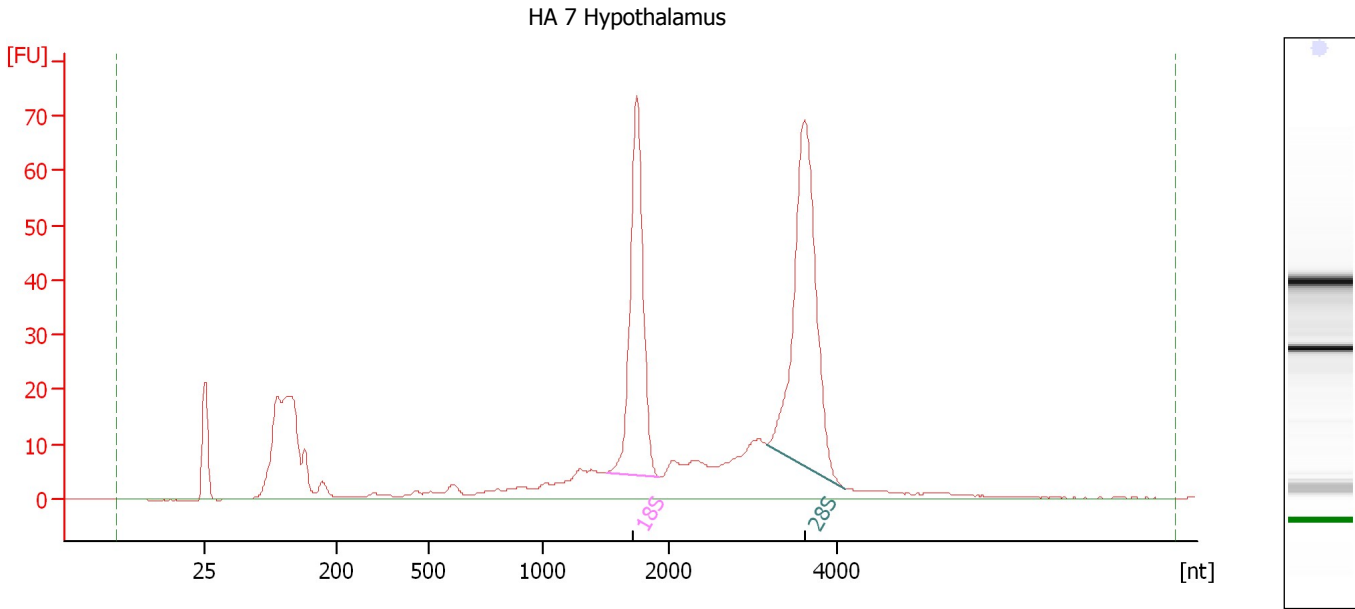
Fragment table for sample 3 : HA 7 Thalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,553 | 1,966 | 57.6 | 20.0 |
| 28S | 2,717 | 4,354 | 100.4 | 34.8 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HA 7 Hypothalamus

RNA Area: 579.3 RNA Integrity Number (RIN): 9 (B.02.08)
RNA Concentration: 1,936 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.3 Result Flagging Label: RIN:9

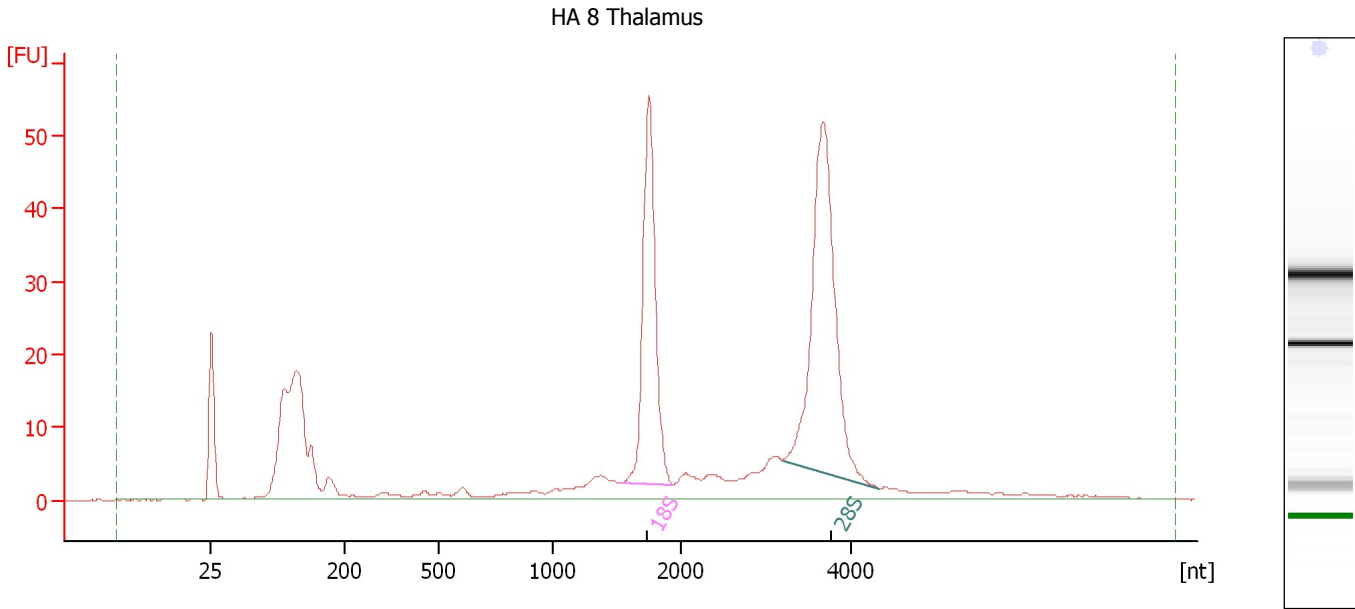
Fragment table for sample 4 : HA 7 Hypothalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,515 | 1,934 | 109.7 | 18.9 |
| 28S | 3,173 | 4,113 | 145.5 | 25.1 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : HA 8 Thalamus

RNA Area: 416.0 RNA Integrity Number (RIN): 9.4 (B.02.08)
RNA Concentration: 1,390 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.4 Result Flagging Label: RIN: 9.40

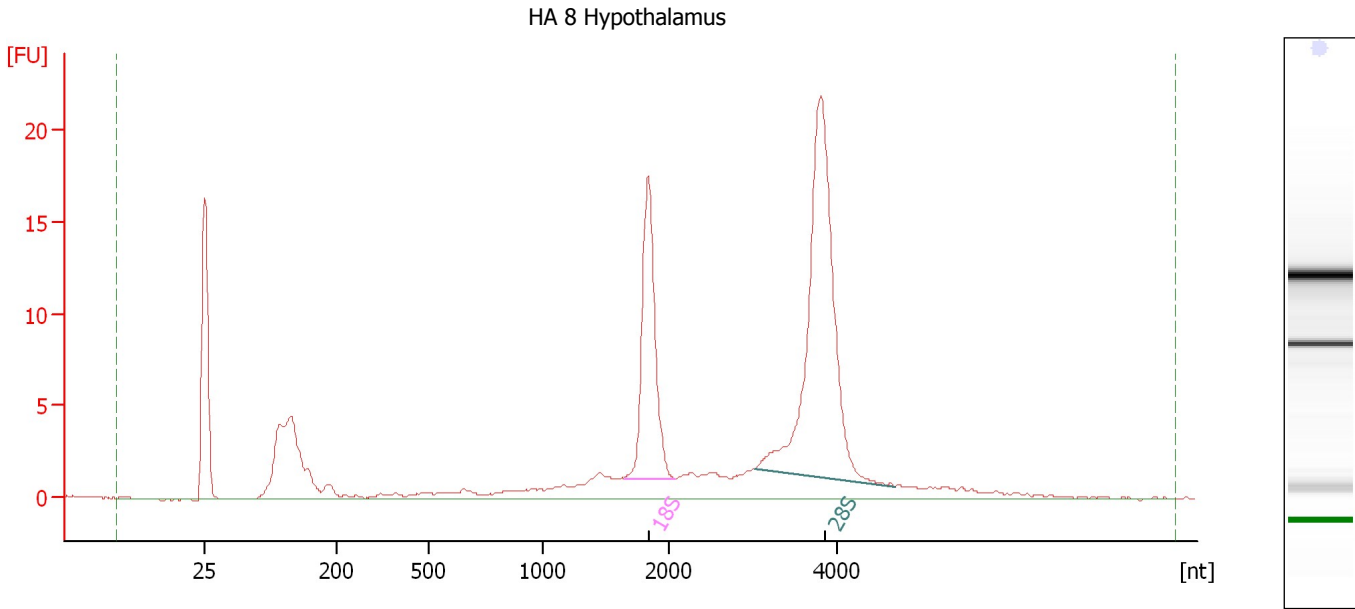
Fragment table for sample 5 : HA 8 Thalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,542 | 1,947 | 79.7 | 19.2 |
| 28S | 3,202 | 4,332 | 112.6 | 27.1 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HA 8 Hypothalamus

RNA Area: 157.5 RNA Integrity Number (RIN): 9.5 (B.02.08)
RNA Concentration: 526 µg/µl Result Flagging Color:
rRNA Ratio [28s / 18s]: 2.1 Result Flagging Label: RIN: 9.50

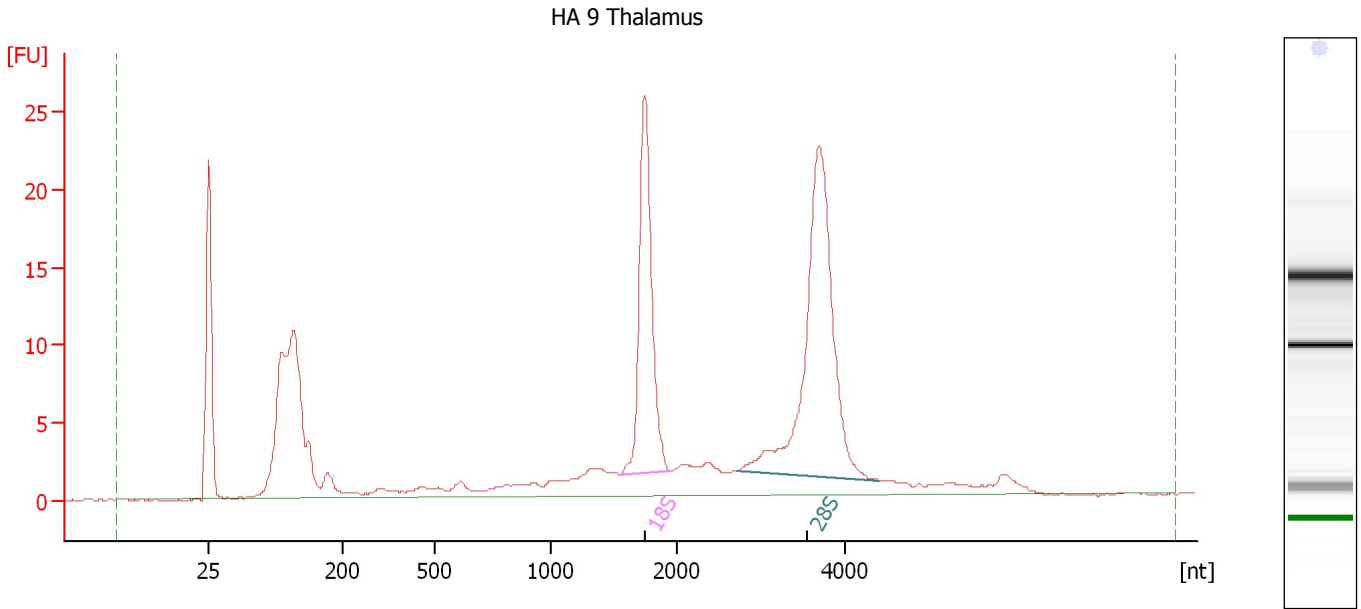
Fragment table for sample 6 : HA 8 Hypothalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,652 | 2,080 | 25.4 | 16.1 |
| 28S | 3,033 | 4,698 | 53.3 | 33.8 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : HA 9 Thalamus

RNA Area: 225.6 RNA Integrity Number (RIN): 9.2 (B.02.08)
RNA Concentration: 754 µg/µl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.7 Result Flagging Label: RIN: 9.20

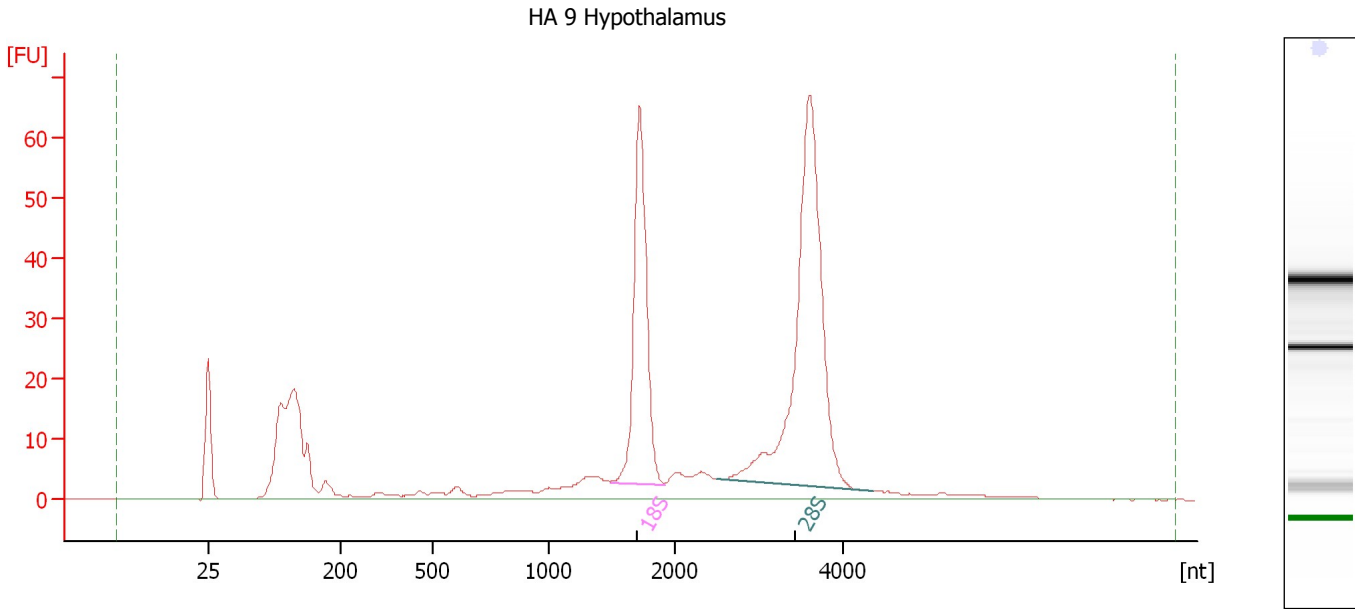
Fragment table for sample 7 : HA 9 Thalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,547 | 1,954 | 36.4 | 16.1 |
| 28S | 2,726 | 4,402 | 60.3 | 26.7 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : HA 9 Hypothalamus

RNA Area: 494.4 RNA Integrity Number (RIN): 9.6 (B.02.08)
RNA Concentration: 1,652 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.8 Result Flagging Label: RIN: 9.60

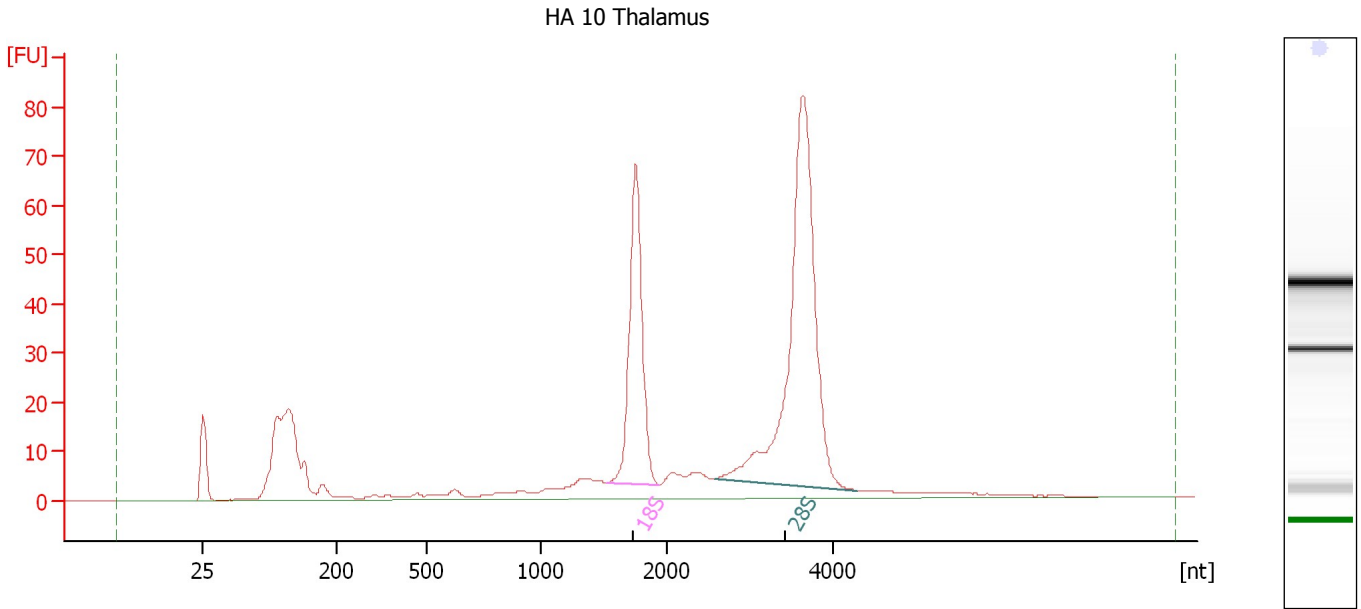
Fragment table for sample 8 : HA 9 Hypothalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,494 | 1,919 | 96.0 | 19.4 |
| 28S | 2,499 | 4,343 | 173.0 | 35.0 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : HA 10 Thalamus

RNA Area: 560.3 RNA Integrity Number (RIN): 9.7 (B.02.08)
RNA Concentration: 1,873 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 2.1 Result Flagging Label: RIN: 9.70

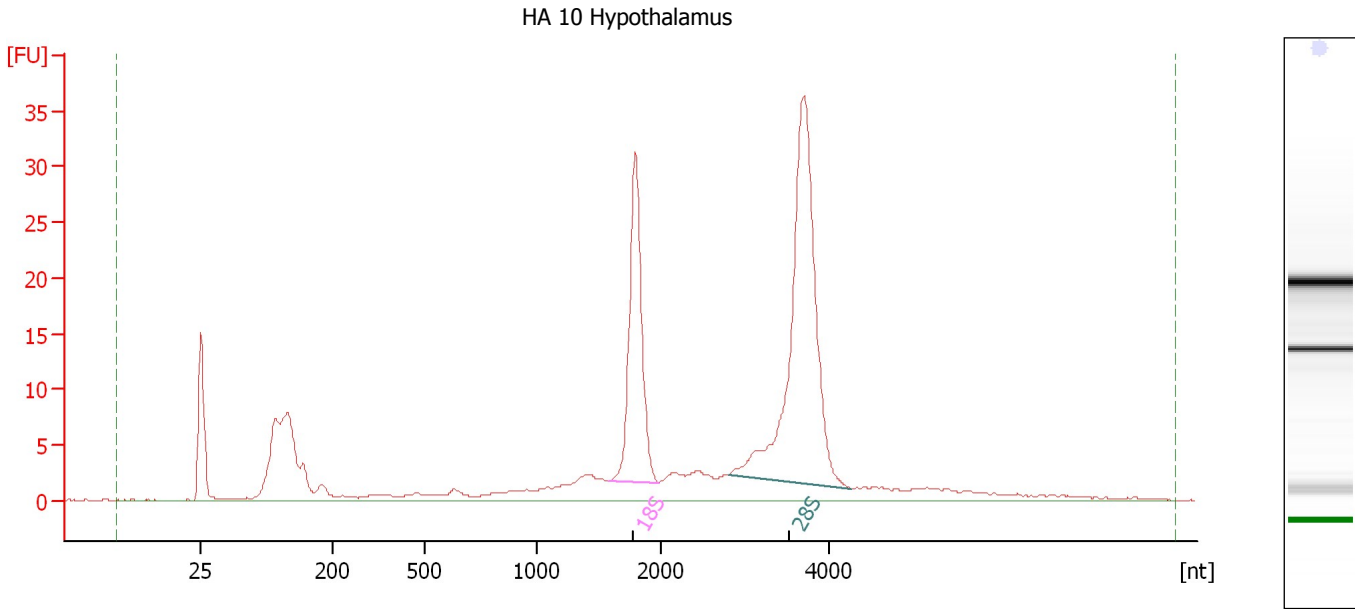
Fragment table for sample 9 : HA 10 Thalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|-------|-----------------|
| 18S | 1,530 | 1,941 | 101.1 | 18.0 |
| 28S | 2,576 | 4,270 | 210.6 | 37.6 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : HA 10 Hypothalamus

RNA Area: 269.1 RNA Integrity Number (RIN): 9.5 (B.02.08)
RNA Concentration: 899 pg/μl Result Flagging Color:
rRNA Ratio [28s / 18s]: 2.0 Result Flagging Label: RIN: 9.50

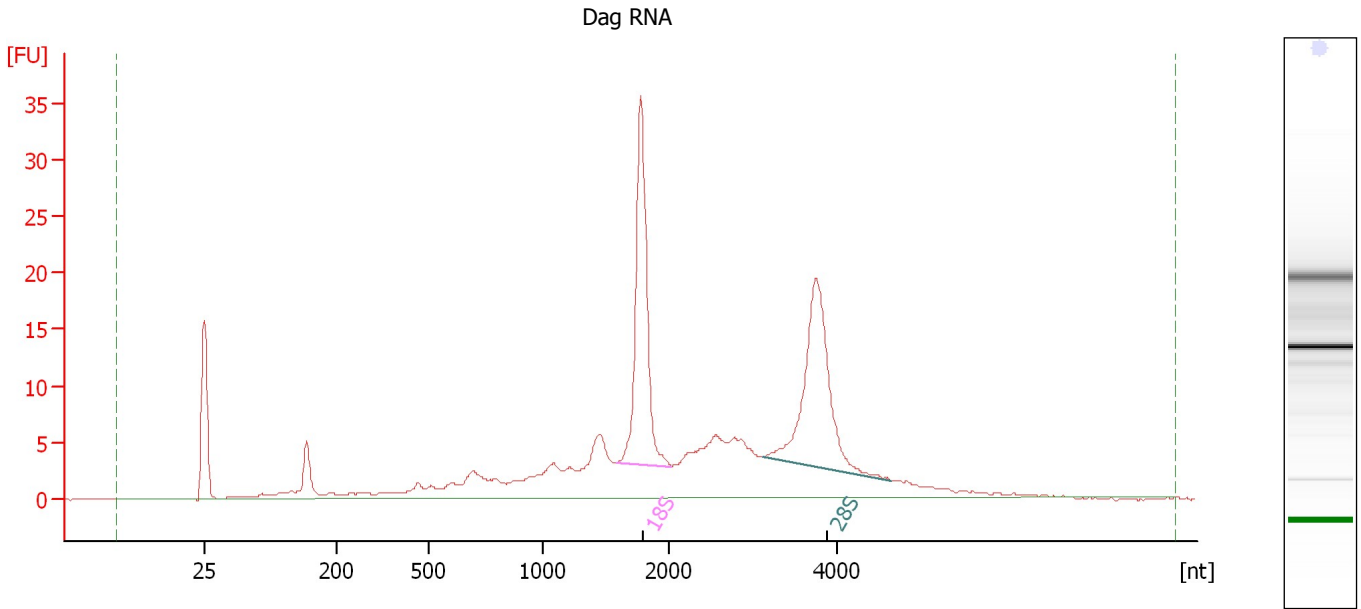
Fragment table for sample 10 : HA 10 Hypothalamus

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,578 | 1,974 | 44.6 | 16.6 |
| 28S | 2,806 | 4,265 | 88.6 | 32.9 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : Dag RNA

RNA Area: 252.7 RNA Integrity Number (RIN): 7.8 (B.02.08)
RNA Concentration: 845 µg/µl Result Flagging Color:
rRNA Ratio [28s / 18s]: 1.0 Result Flagging Label: RIN: 7.80

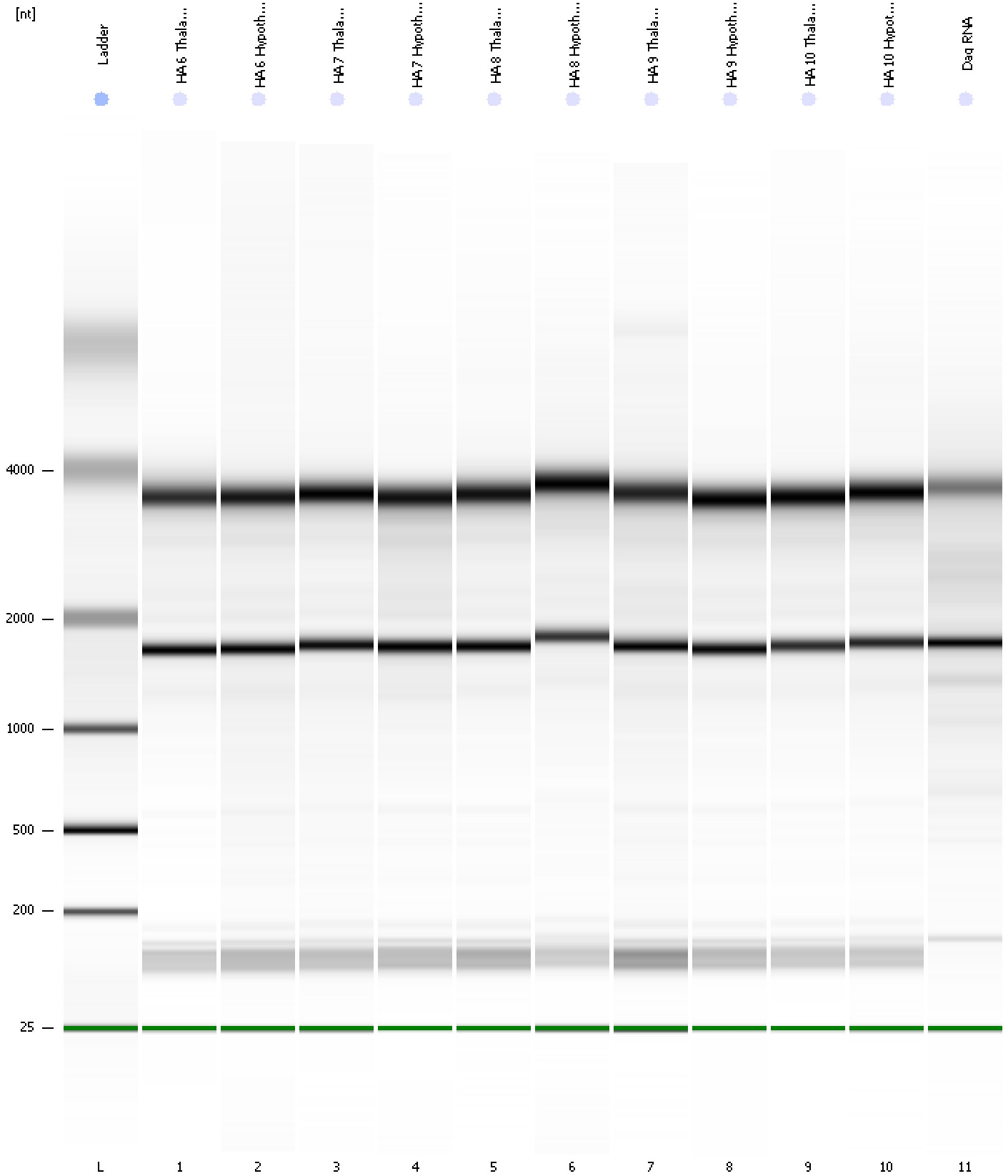
Fragment table for sample 11 : Dag RNA

| Name | Start Size [nt] | End Size [nt] | Area | % of total Area |
|------|-----------------|---------------|------|-----------------|
| 18S | 1,583 | 2,041 | 43.2 | 17.1 |
| 28S | 3,122 | 4,660 | 42.2 | 16.7 |

Assay Class: Eukaryote Total RNA Pico
Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
Modified: 11/7/2016 12:11:20 PM

Gel Image



Assay Class: Eukaryote Total RNA Pico
 Data Path: C:\... bioanalyzer\2100 expert\data\2016-11-07\2016-11-07_001.xad

Created: 11/7/2016 11:48:25 AM
 Modified: 11/7/2016 12:11:20 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 | | 11/7/2016 12:11:19 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\2016-11-07\2016-11-07_001.xad) | | Instrument | Run | | 11/7/2016 11:48:31 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Product Number : G2938B | | Instrument | Run | | 11/7/2016 11:48:31 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Name : | | Instrument | Run | | 11/7/2016 11:48:31 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Vendor : Agilent Technologies | | Instrument | Run | | 11/7/2016 11:48:31 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Serial# : DE13701086 | | Instrument | Run | | 11/7/2016 11:48:31 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Firmware : C.01.069 | | Instrument | Run | | 11/7/2016 11:48:31 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |
| Cartridge : Electrode | | Instrument | Run | | 11/7/2016 11:48:31 AM | (GMT --08:00) Pacific Standard Time | UC Davis | D8XSMGH1 |