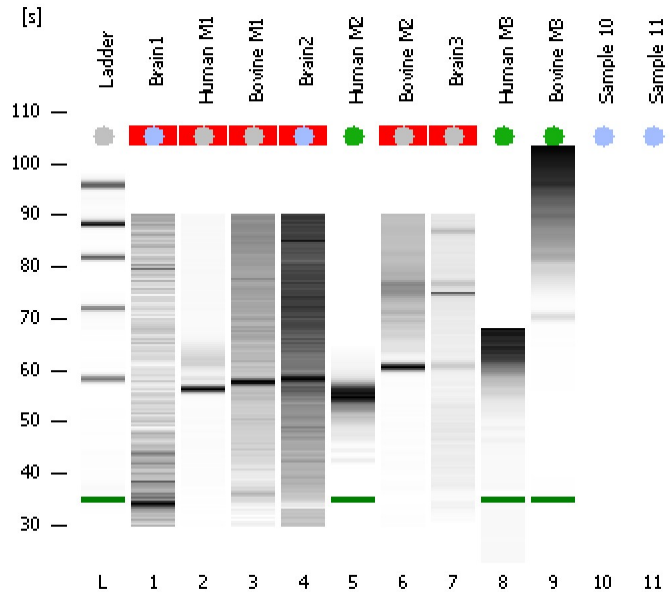


Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
 Modified: 4/17/2015 2:33:50 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\Small RNA Series II.xsy

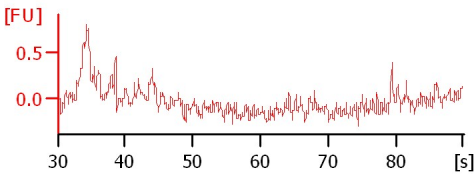
Assay Class: Small RNA
 Version: 1.2
 Assay Comments: Small RNA Analysis 6 - 150 nucleotides

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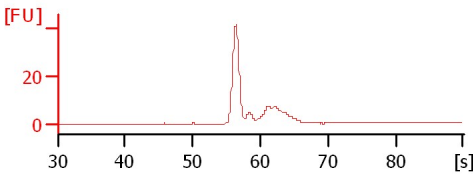
Chip Information:

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

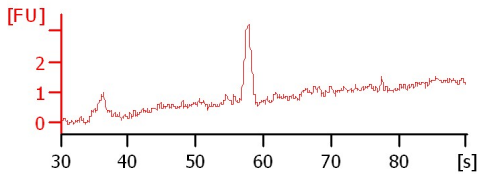
Brain1
 All Other Samples



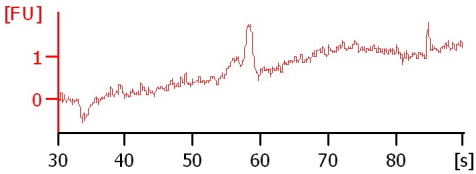
Human M1
 Number of Peaks: 4



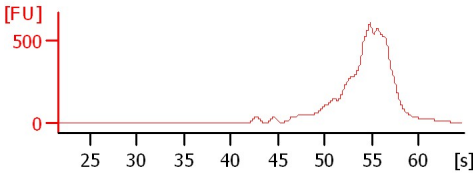
Bovine M1
 Number of Peaks: 2



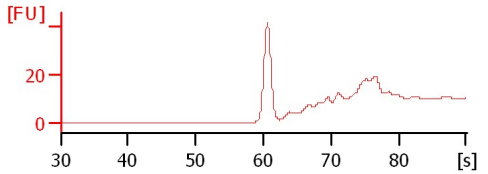
Brain2
 All Other Samples



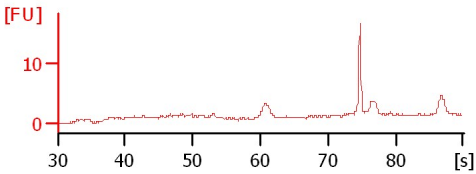
Human M2
 94 % miRNA; Concentration: 195069.80 ...



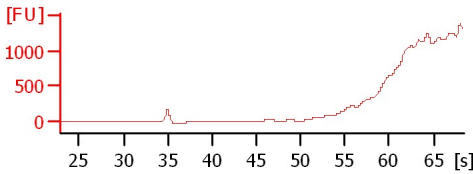
Bovine M2
 Number of Peaks: 13



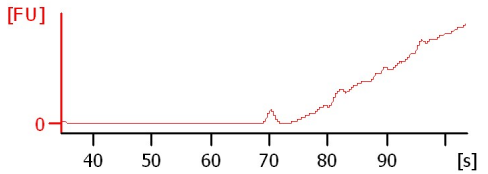
Brain3
 Number of Peaks: 4



Human M3
 99 % miRNA; Concentration: 9329.10 pg/ul



Bovine M3
 26 % miRNA; Concentration: 5429.70 pg/ul



Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Status	Result Label	Result Color
Brain1		✓	All Other Samples	Blue
Human M1		✓	Number of Peaks: 4	Grey
Bovine M1		✓	Number of Peaks: 2	Grey
Brain2		✓	All Other Samples	Blue
Human M2		✓	94 % miRNA; Concentration: 195069.80 pg/μl	Green
Bovine M2		✓	Number of Peaks: 13	Grey
Brain3		✓	Number of Peaks: 4	Grey
Human M3		✓	99 % miRNA; Concentration: 9329.10 pg/μl	Green
Bovine M3		✓	26 % miRNA; Concentration: 5429.70 pg/μl	Green
Sample 10				Blue
Sample 11				Blue
Ladder		✓	Number of Peaks: 8	Grey

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12

Minimum Visible Range [s] : 30

Maximum Visible Range [s] : 90

Start Analysis Time Range [s] : 31

End Analysis Time Range [s] : 89

Ladder Concentration [pg/ μ l] : 2500

Lower Marker Concentration [pg/ μ l] : 500

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] : 30

Integration End Time [s] : 89

Slope Threshold : 0.6

Height Threshold [FU] : 3

Area Threshold : 0.2

Width Threshold [s] : 0.5

Baseline Plateau [s] : 60

Filter Settings

Filter Width [s] : 0.5

Polynomial Order : 4

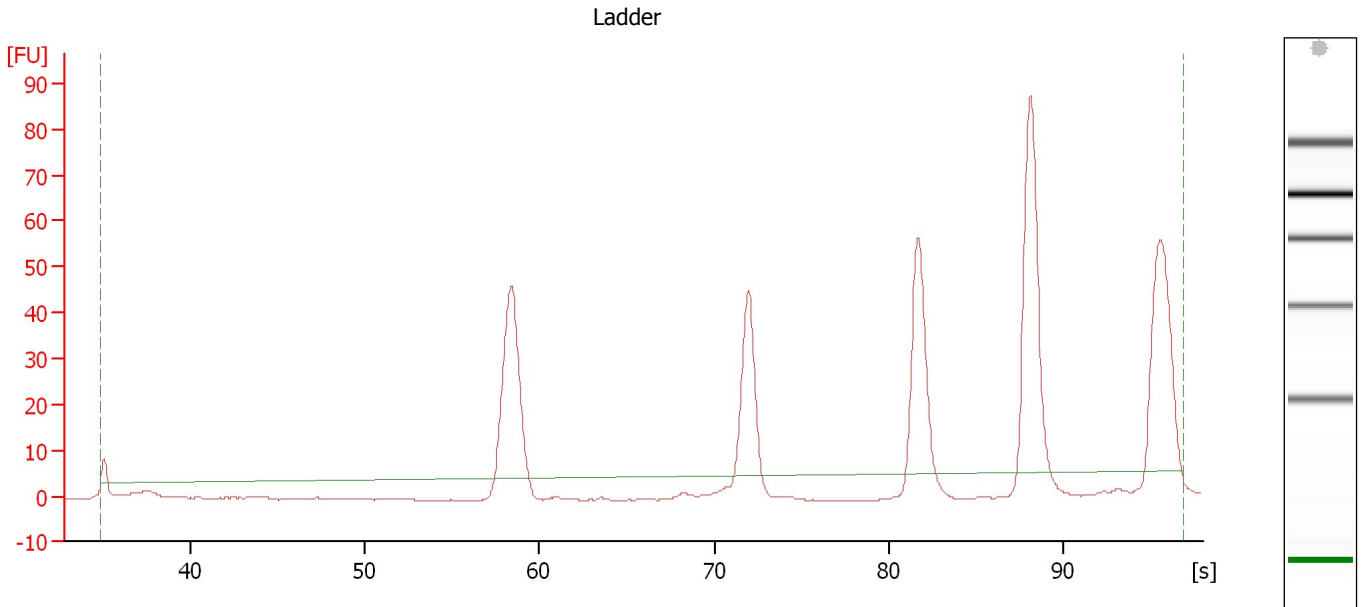
Ladder

Ladder Peak	Size
1	4
2	20
3	40
4	60
5	80
6	100
7	150

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary



Overall Results for Ladder

Result Flagging Color:

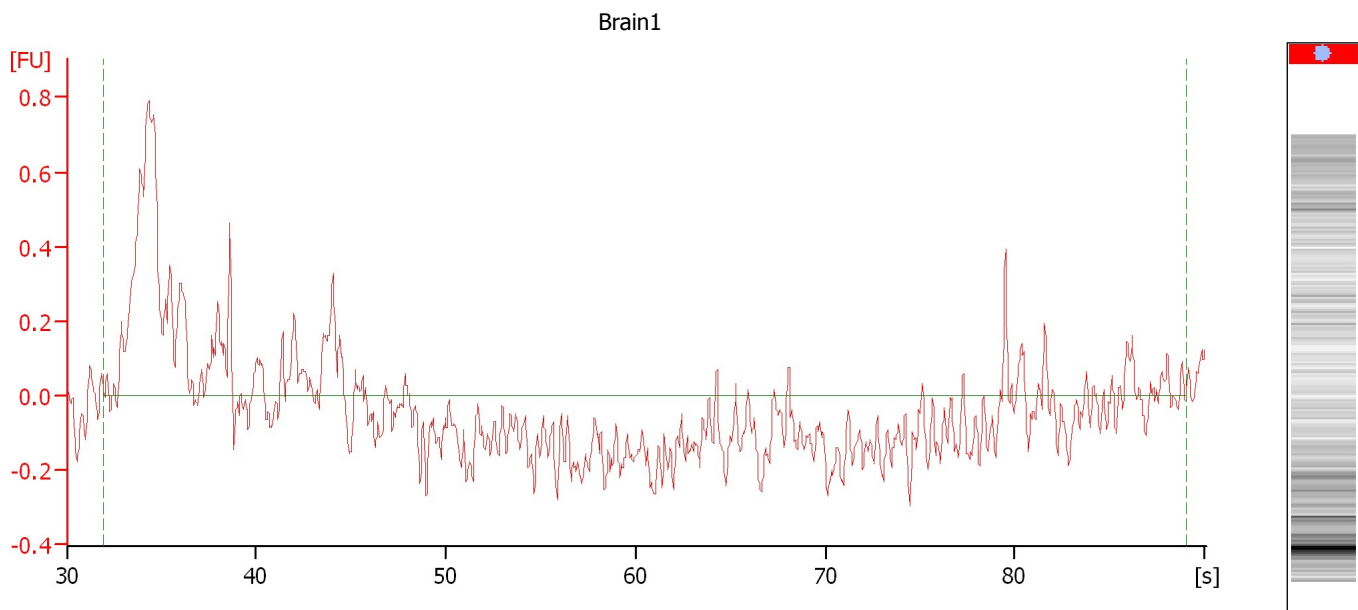
Result Flagging Label:

Number of Peaks: 8

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : Brain1

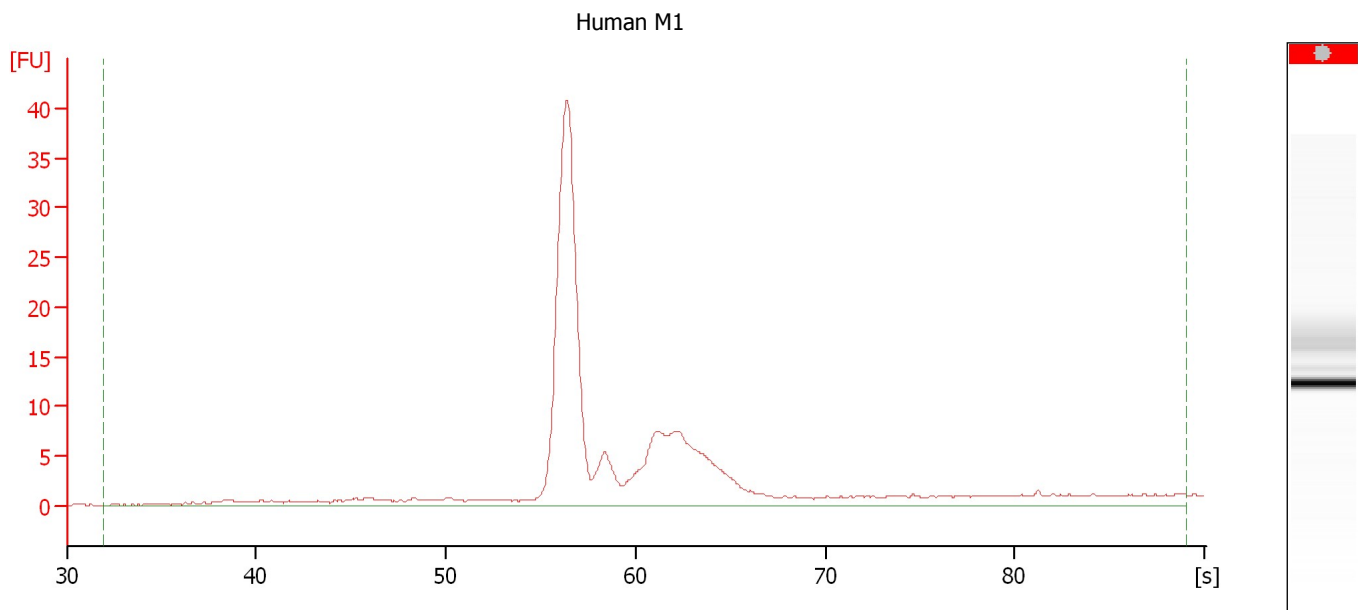
Result Flagging Color:

Result Flagging Label: All Other Samples

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : Human M1

Result Flagging Color:



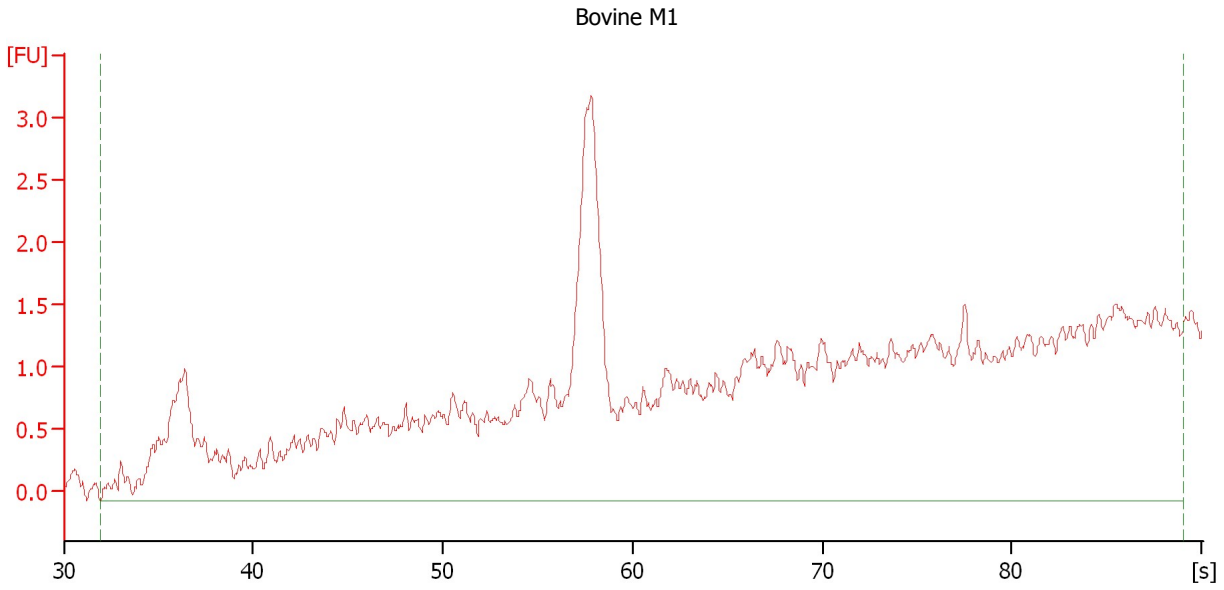
Result Flagging Label:

Number of Peaks: 4

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : Bovine M1

Result Flagging Color:

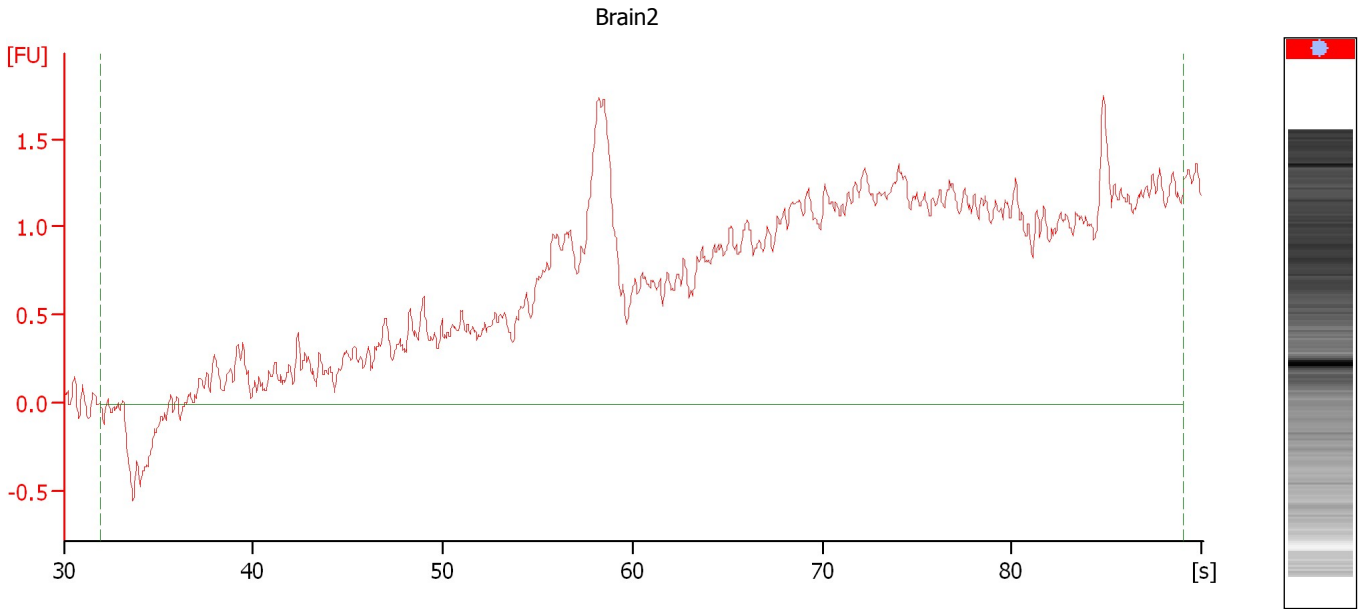
Result Flagging Label:

Number of Peaks: 2

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : Brain2

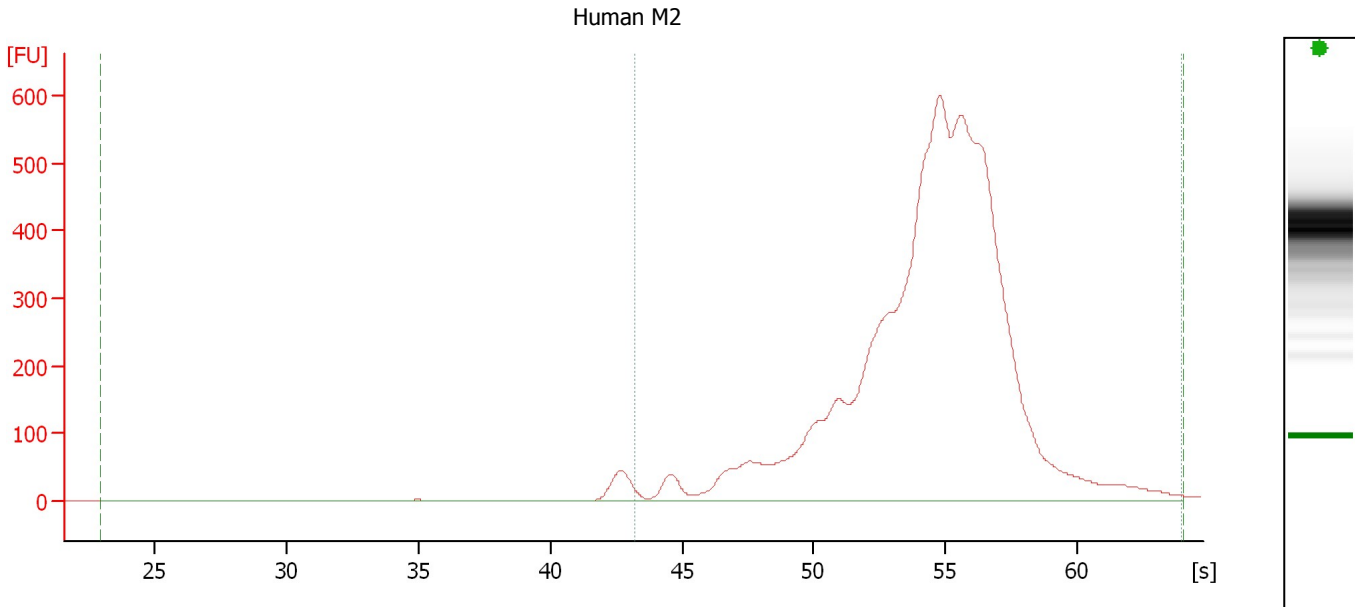
Result Flagging Color:

Result Flagging Label: All Other Samples

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
 Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : Human M2

Small RNA Concentration [pg/μl]:	208,073.3	Result Flagging Color:	
miRNA Concentration [pg/μl]:	195,069.8	Result Flagging Label:	94 % miRNA; Concentration: 195069.80 pg/μl
miRNA / Small RNA Ratio [%]:	94		

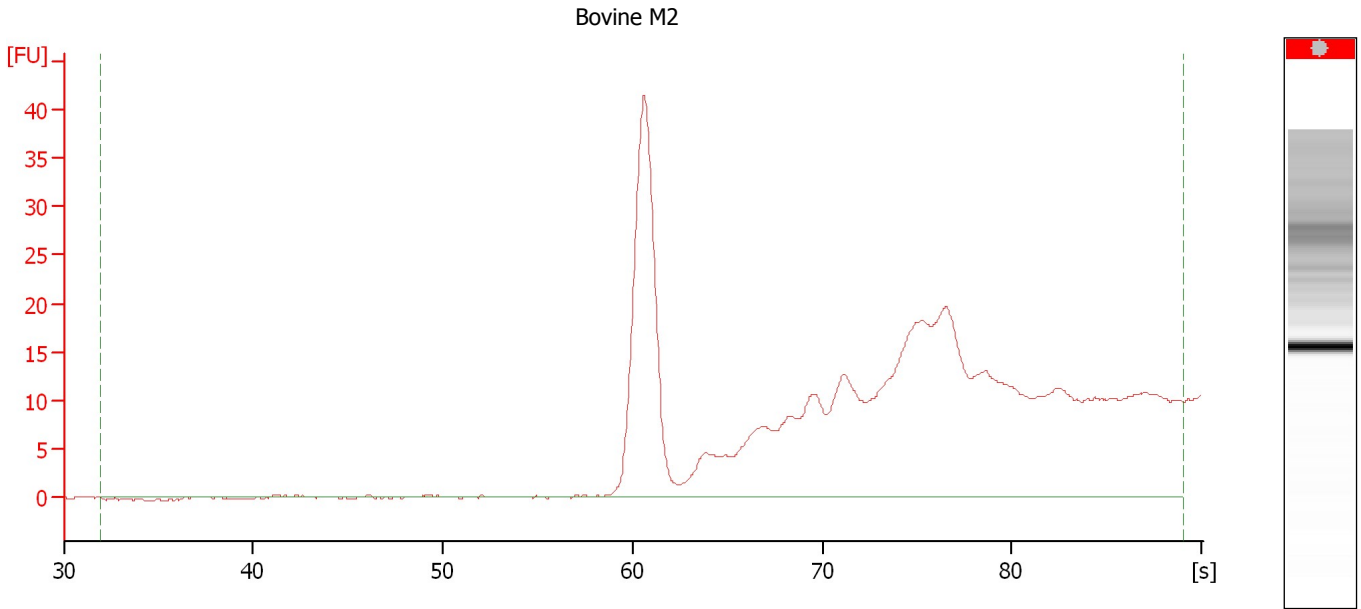
Region table for sample 5 : Human M2

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	29	17	15.0	208,073.3	100	
miRNA	10	29	17	13.5	195,069.8	94	

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : Bovine M2

Result Flagging Color:

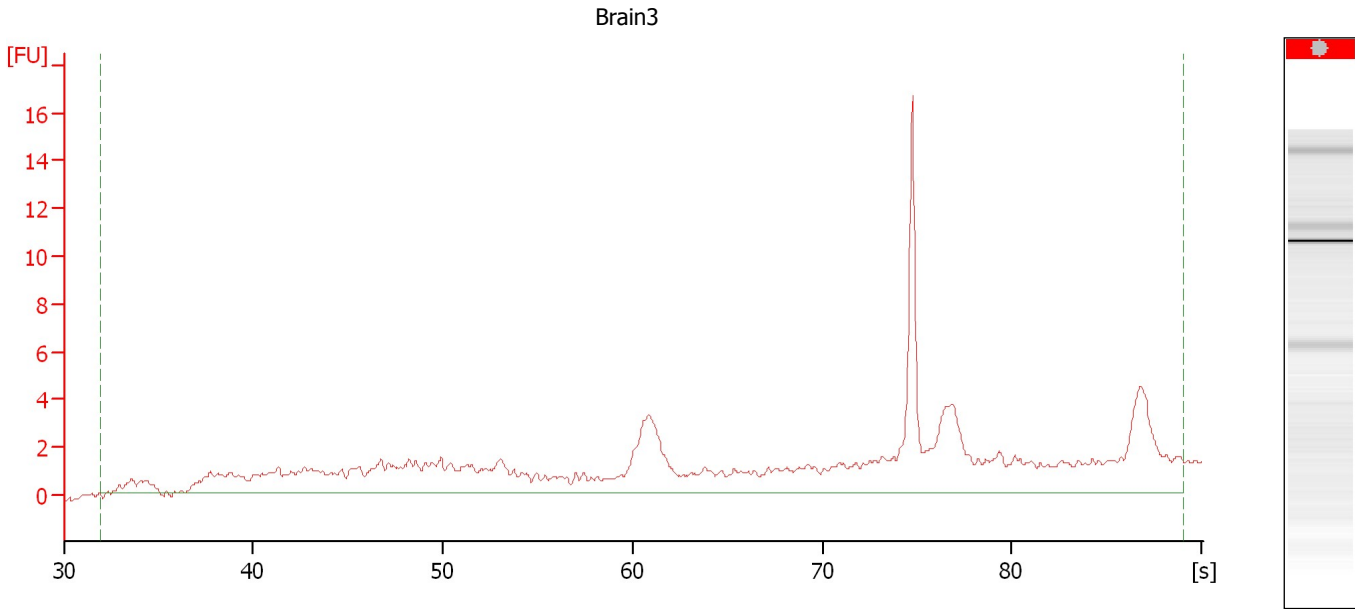
Result Flagging Label:

Number of Peaks: 13

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Brain3

Result Flagging Color:

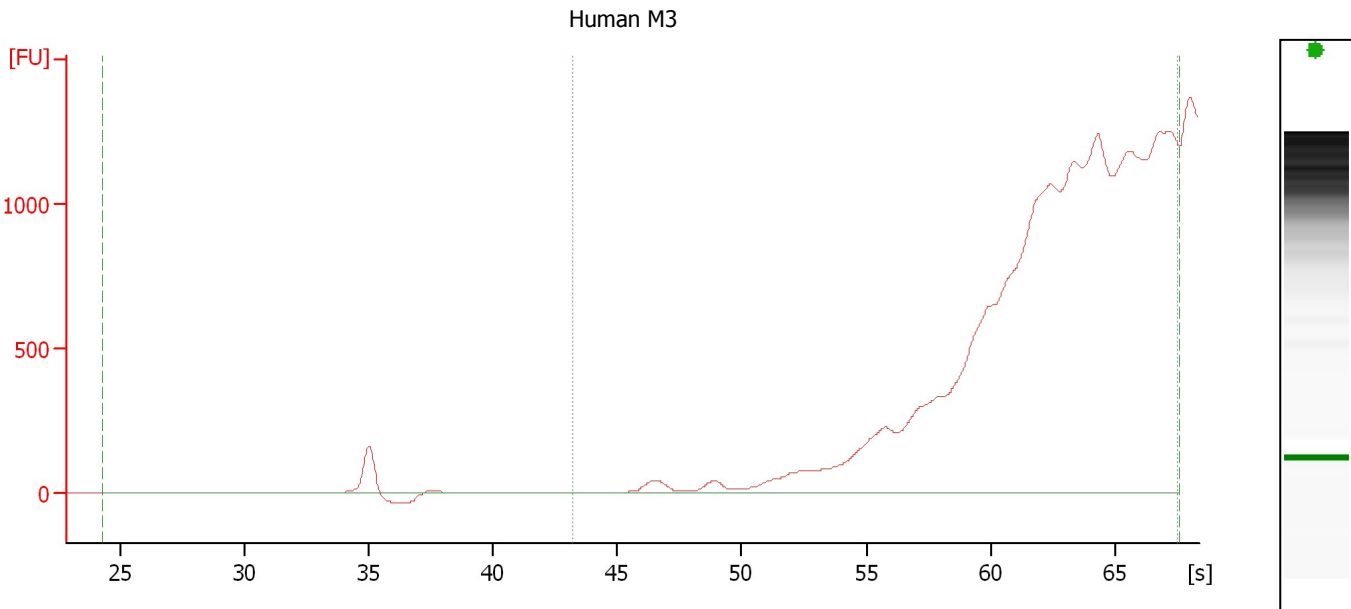
Result Flagging Label:

Number of Peaks: 4

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
 Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : Human M3

Small RNA Concentration [pg/μl]:	9,427.1	Result Flagging Color:	
miRNA Concentration [pg/μl]:	9,329.1	Result Flagging Label:	99 % miRNA; Concentration: 9329.10 pg/μl
miRNA / Small RNA Ratio [%]:	99		

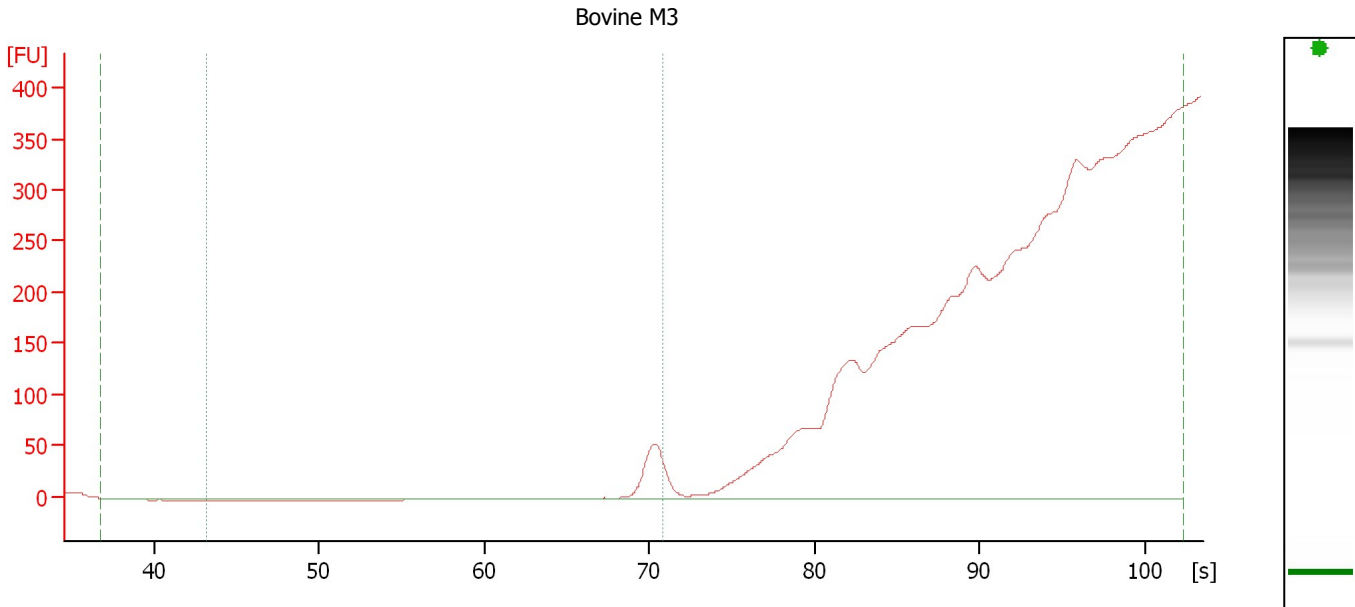
Region table for sample 8 : Human M3

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	0	35	27	20.5	9,427.1	100	
miRNA	10	35	27	18.9	9,329.1	99	

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
 Modified: 4/17/2015 2:33:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : Bovine M3

Small RNA Concentration [pg/μl]:	20,821.9	Result Flagging Color:	
miRNA Concentration [pg/μl]:	5,429.7	Result Flagging Label:	26 % miRNA; Concentration: 5429.70 pg/μl
miRNA / Small RNA Ratio [%]:	26		

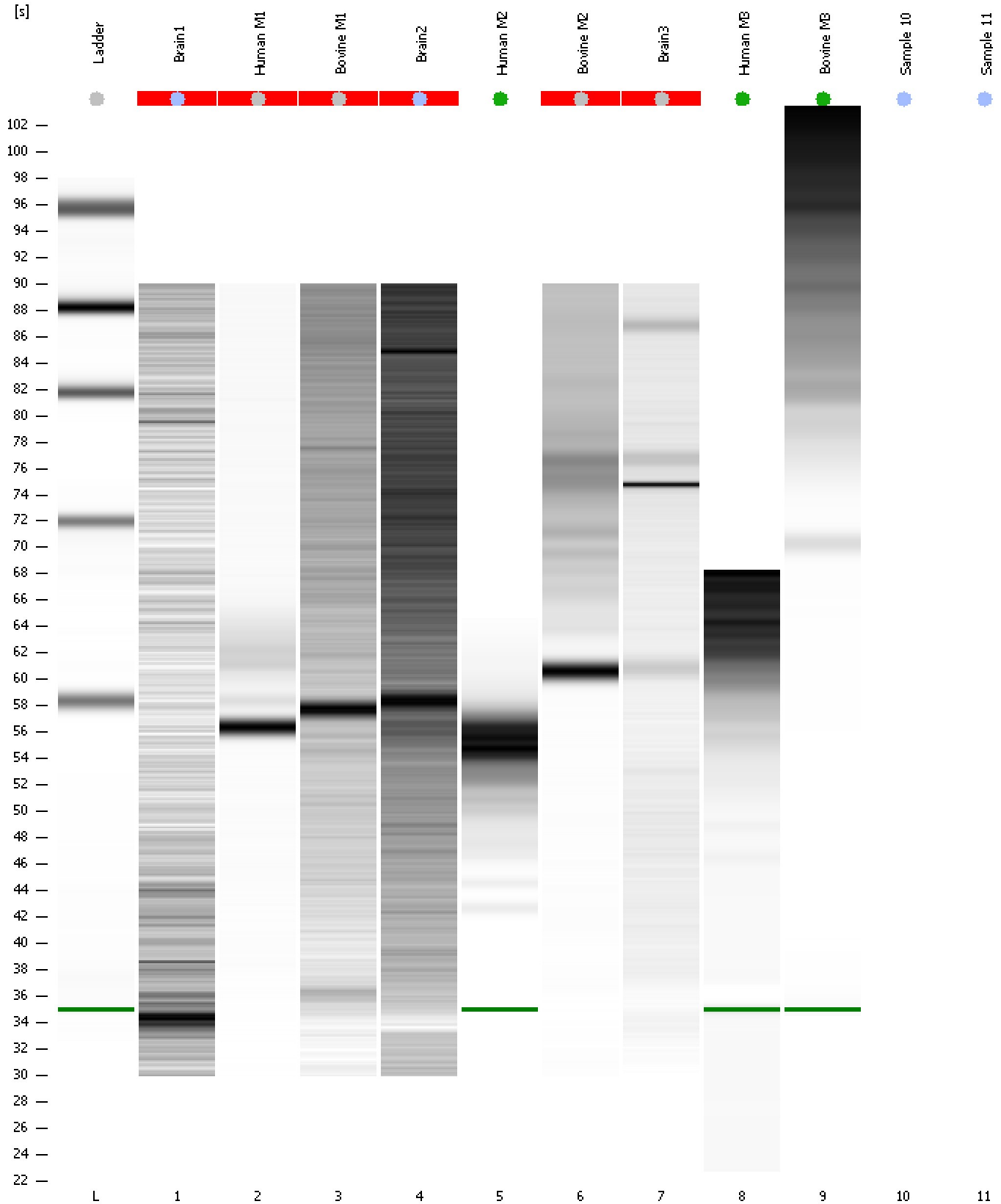
Region table for sample 9 : Bovine M3

Name	From [nt]	To [nt]	Average Size [nt]	Size distribution in CV [%]	Conc. [pg/μl]	% of Total	Color
Small RNA	5	195	135	28.9	20,821.9	100	
miRNA	10	40	39	1.9	5,429.7	26	

Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Gel Image



Assay Class: Small RNA
Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
Modified: 4/17/2015 2:33:50 PM

Invalid Samples

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: Small RNA
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad

Created: 4/17/2015 1:44:11 PM
 Modified: 4/17/2015 2:33:50 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		4/17/2015 2:12:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-04-17\2015-04-17_002.xad)		Instrument	Run		4/17/2015 1:44:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		4/17/2015 1:44:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		4/17/2015 1:44:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		4/17/2015 1:44:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		4/17/2015 1:44:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		4/17/2015 1:44:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		4/17/2015 1:44:17 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1