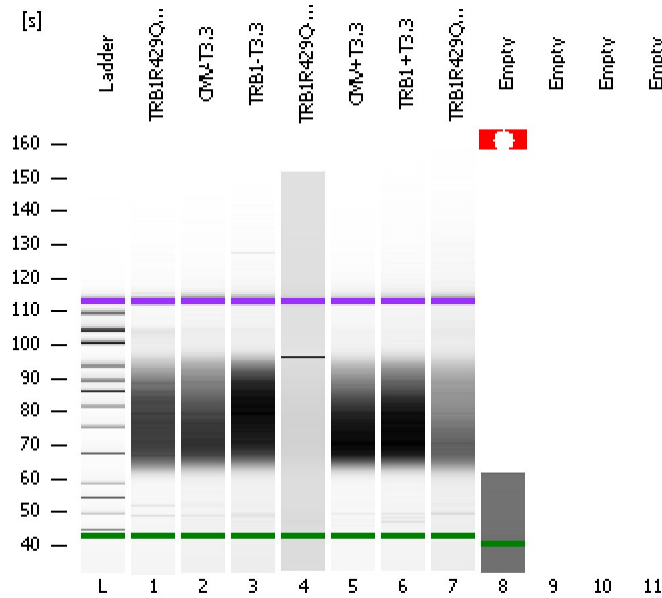


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
Modified: 5/18/2015 12:51:01 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\dsDNA\High Sensitivity DNA.xsy
Assay Class: High Sensitivity DNA Assay
Version: 1.03
Assay Comments: Copyright © 2003-2010 Agilent Technologies

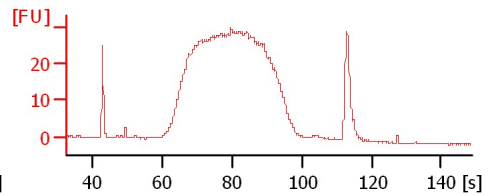
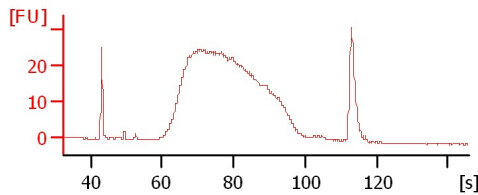
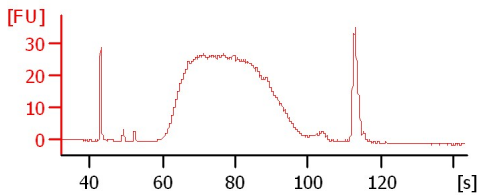
Chip Information:

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

TRB1R429Q+T3.2

CMV+T3.3

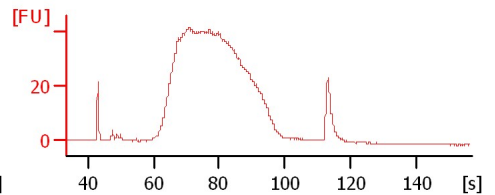
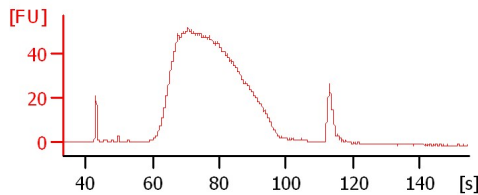
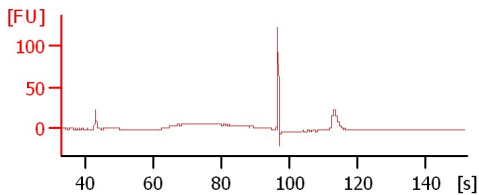
TRB1-T3.3



TRB1R429Q-T3.3

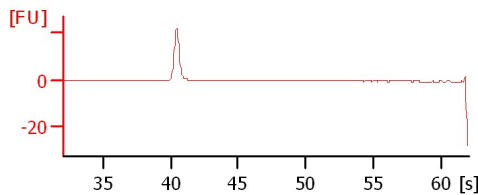
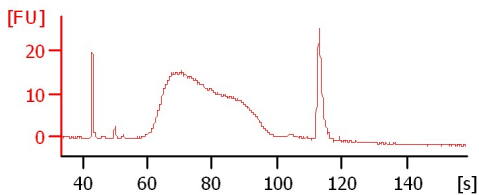
CMV+T3.3

TRB1+T3.3



TRB1R429Q+T3.3

Empty



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TRB1R429Q+T3.2		<input type="checkbox"/>	✓			
CMV-T3.3		<input type="checkbox"/>	✓			
TRB1-T3.3		<input type="checkbox"/>	✓			
TRB1R429Q-T3.3		<input type="checkbox"/>	✓			
CMV+T3.3		<input type="checkbox"/>	✓			
TRB1+T3.3		<input type="checkbox"/>	✓			
TRB1R429Q+T3.3		<input type="checkbox"/>	✓			
Empty		<input type="checkbox"/>	✗			
Empty		<input type="checkbox"/>	✗			
Empty		<input type="checkbox"/>	✗			
Empty		<input type="checkbox"/>	✗			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
Modified: 5/18/2015 12:51:01 PM

Electrophoresis Assay Details

General Analysis Settings

Number of Available Sample and Ladder Wells (Max.) : 12
Minimum Visible Range [s] : 32
Maximum Visible Range [s] : 138
Start Analysis Time Range [s] : 33
End Analysis Time Range [s] : 137.5
Ladder Concentration [pg/μl] : 1950
Uses Standard Area for Ladder Fragments
Lower Marker Concentration [pg/μl] : 125
Upper Marker Concentration [pg/μl] : 75
Used Upper Marker for Quantitation
Standard Curve Fit is Point to Point
Show Data Aligned to Lower and Upper Marker

Integrator Settings

Integration Start Time [s] : 33.05
Integration End Time [s] : 137
Slope Threshold : 0.8
Height Threshold [FU] : 5
Area Threshold : 0.1
Width Threshold [s] : 0.6
Baseline Plateau [s] : 0.5

Filter Settings

Filter Width [s] : 0.5
Polynomial Order : 4

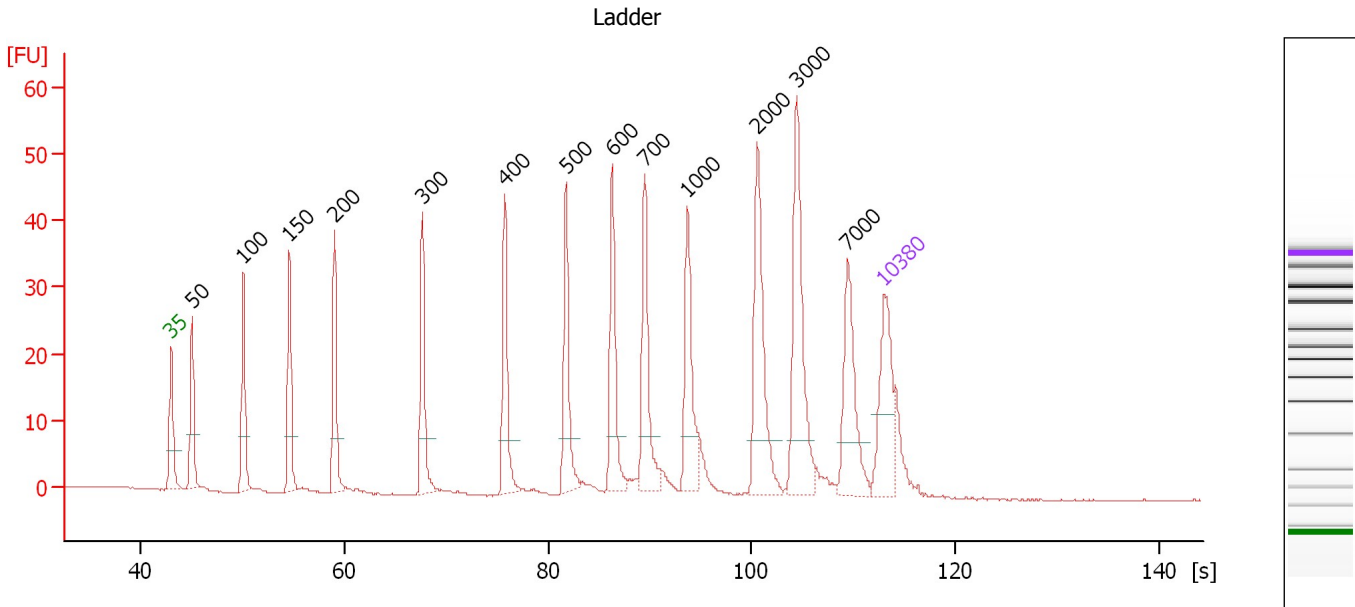
Ladder

Ladder Peak	Size	Area
1	35	160
2	50	210
3	100	208
4	150	221
5	200	242
6	300	270
7	400	305
8	500	306
9	600	336
10	700	321
11	1000	366
12	2000	413
13	3000	411
14	7000	400
15	10380	214

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

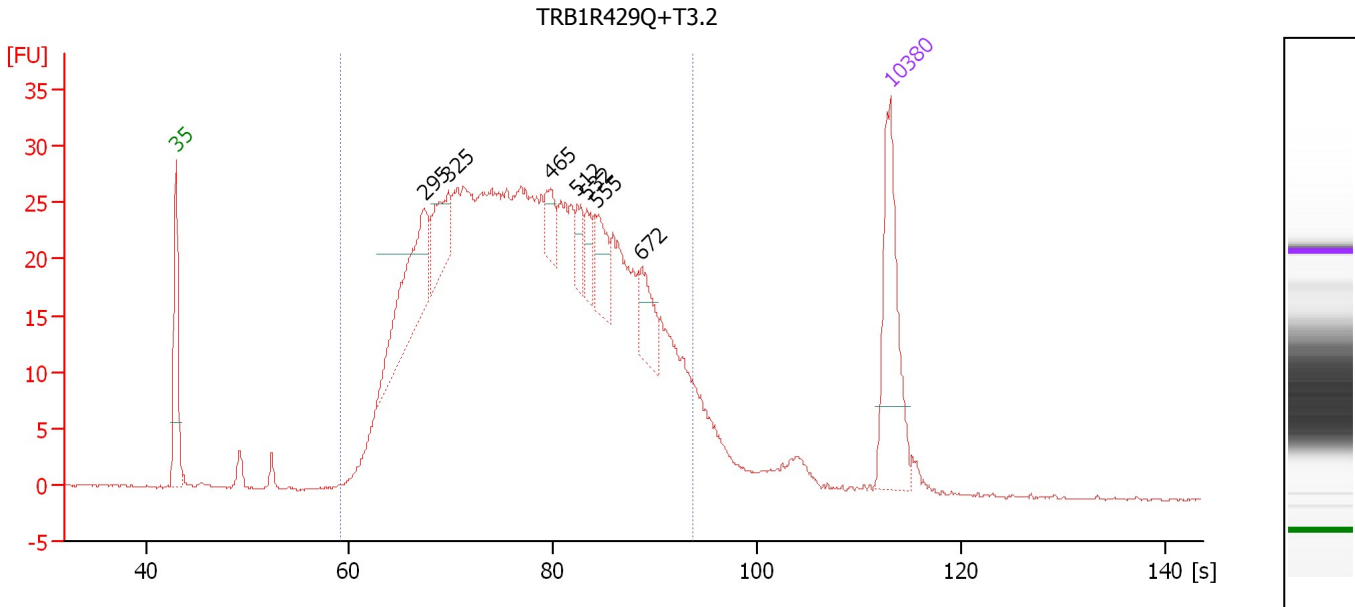
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.06
3	100	150.00	2,272.7	Ladder Peak	50.07
4	150	150.00	1,515.2	Ladder Peak	54.61
5	200	150.00	1,136.4	Ladder Peak	59.04
6	300	150.00	757.6	Ladder Peak	67.69
7	400	150.00	568.2	Ladder Peak	75.76
8	500	150.00	454.5	Ladder Peak	81.77
9	600	150.00	378.8	Ladder Peak	86.31
10	700	150.00	324.7	Ladder Peak	89.53
11	1,000	150.00	227.3	Ladder Peak	93.69
12	2,000	150.00	113.6	Ladder Peak	100.55
13	3,000	150.00	75.8	Ladder Peak	104.45
14	7,000	150.00	32.5	Ladder Peak	109.47
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : TRB1R429Q+T3.2

Number of peaks found: 7 Corr. Area 1: 884.5
 Noise: 0.1

Peak table for sample 1 : TRB1R429Q+T3.2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	295	104.17	534.8		67.26
3	325	43.43	202.6		69.68
4	465	19.39	63.2		79.68
5	512	16.44	48.7		82.32
6	532	14.94	42.6		83.21
7	555	26.83	73.3		84.26
8	672	30.44	68.6		88.63
9	10,380	75.00	10.9	Upper Marker	113.00

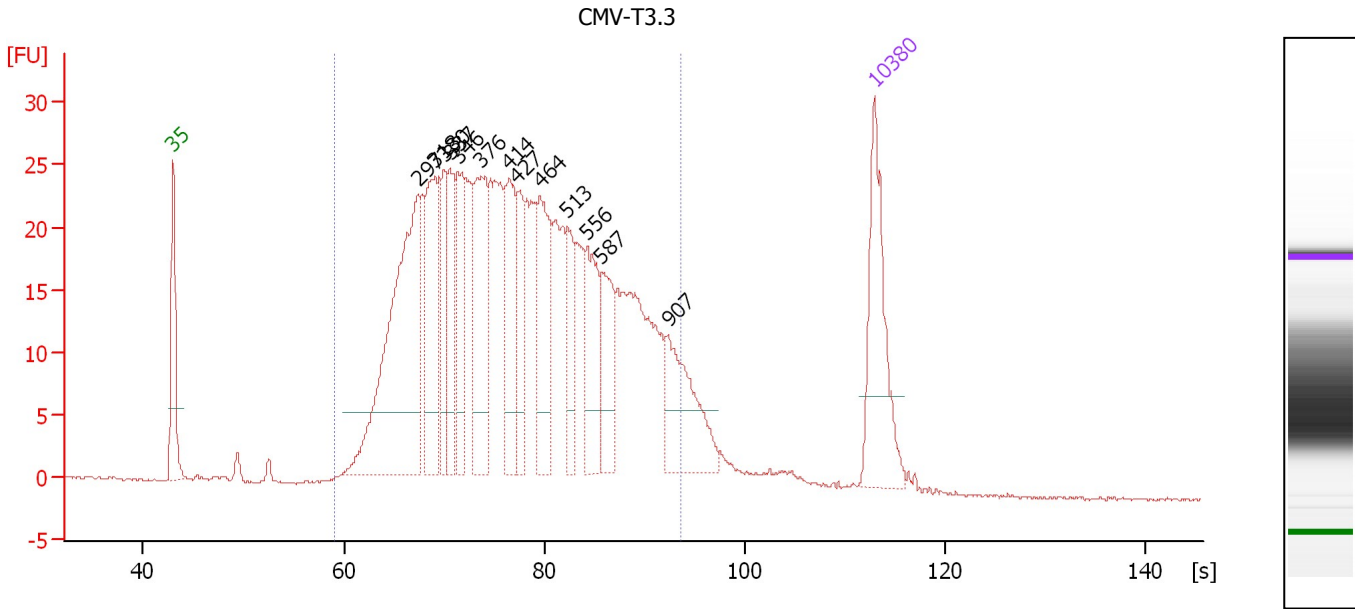
Region table for sample 1 : TRB1R429Q+T3.2

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	459	1,000	884.5	7,550.8	93	35.0	1,956.97	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : CMV-T3.3

Number of peaks found: 13 Corr. Area 1: 764.3
 Noise: 0.1

Peak table for sample 2 : CMV-T3.3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	297	272.81	1,390.0		67.46
3	318	111.88	532.3		69.18
4	330	56.11	257.8		70.09
5	337	59.70	268.4		70.68
6	346	74.58	326.3		71.43
7	376	102.88	415.0		73.79
8	414	73.37	268.8		76.58
9	427	50.30	178.5		77.38
10	464	83.32	271.8		79.64
11	513	42.65	125.9		82.37
12	556	62.44	170.2		84.30
13	587	54.29	140.2		85.70
14	907	72.36	120.9		92.40
15	10,380	75.00	10.9	Upper Marker	113.00

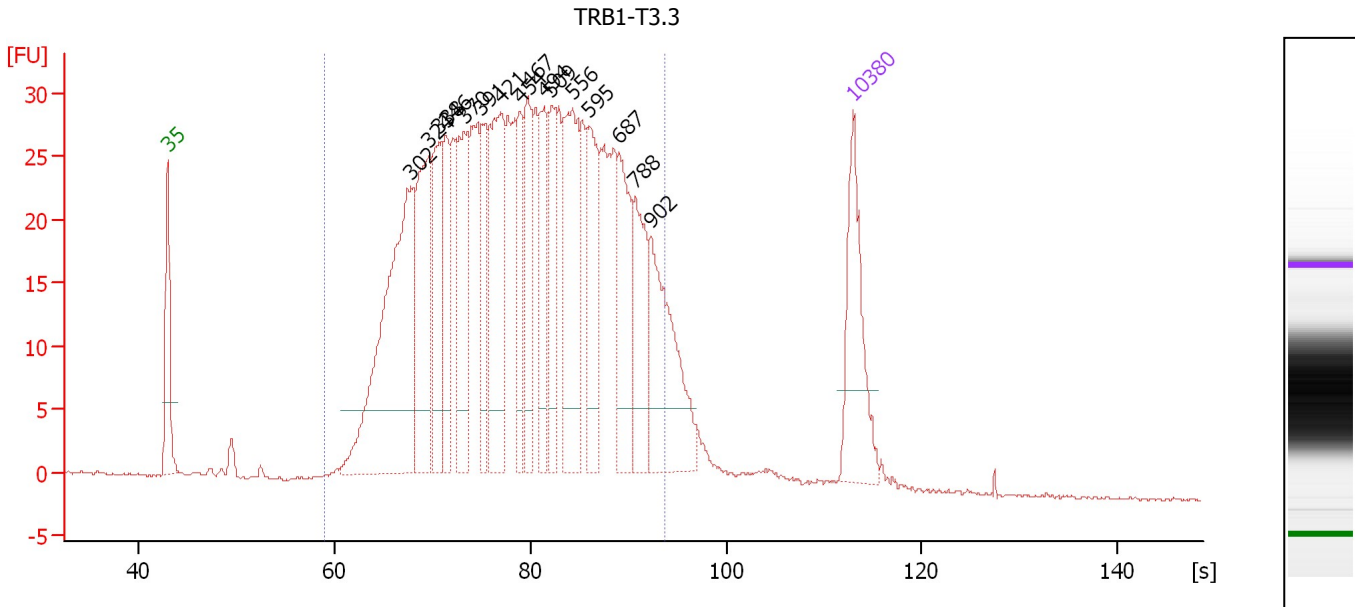
Region table for sample 2 : CMV-T3.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	457	1,000	764.3	6,746.6	94	35.6	1,745.85	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : TRB1-T3.3

Number of peaks found: 16 Corr. Area 1: 945.5
 Noise: 0.1

Peak table for sample 3 : TRB1-T3.3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	302	312.88	1,567.3		67.89
3	324	134.86	630.3		69.64
4	338	94.56	424.1		70.74
5	346	65.13	285.3		71.39
6	370	91.16	373.6		73.31
7	391	61.27	237.2		75.07
8	421	147.58	530.7		77.04
9	454	59.14	197.3		79.01
10	467	74.14	240.6		79.78
11	494	62.47	191.5		81.43
12	509	66.08	196.6		82.19
13	556	128.65	350.3		84.33
14	595	75.46	192.1		86.09
15	687	88.67	195.6		89.10
16	788	75.33	144.9		90.74
17	902	119.88	201.3		92.33
18	10,380	75.00	10.9	Upper Marker	113.00

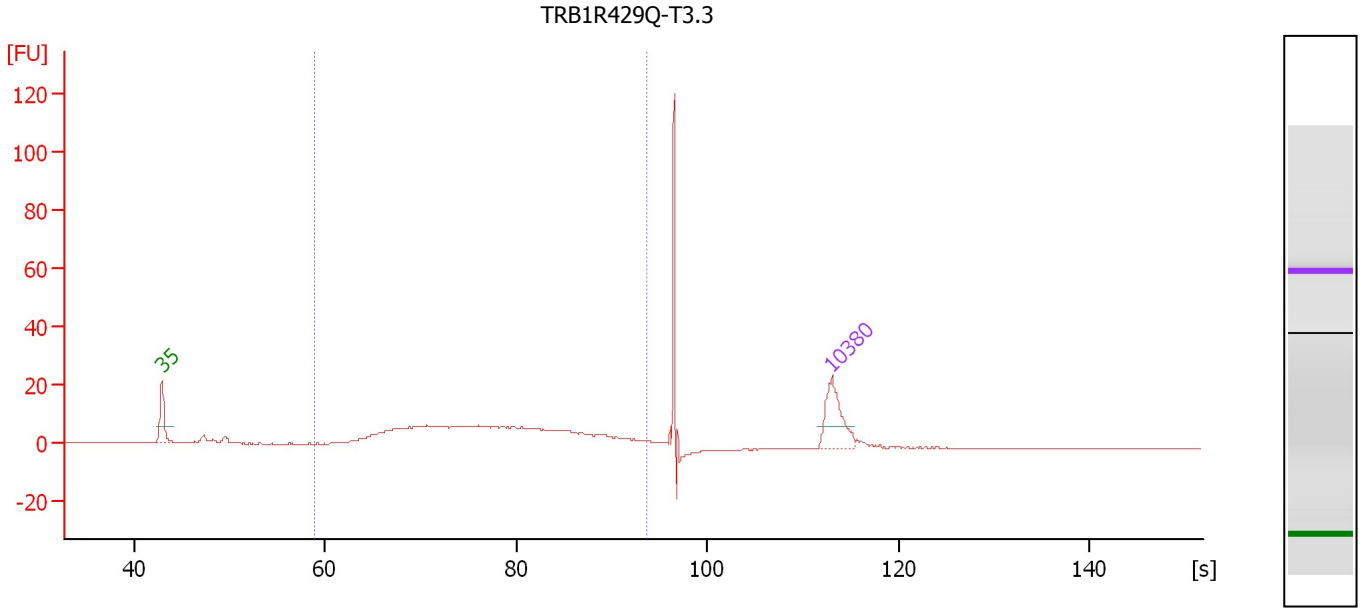
Region table for sample 3 : TRB1-T3.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	488	1,000	945.5	8,359.2	93	34.7	2,300.97	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : TRB1R429Q-T3.3

Number of peaks found: 0
Noise: 0.1
Corr. Area 1: 182.8

Peak table for sample 4 : TRB1R429Q-T3.3

Pea k	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	10,380	75.00	10.9	Upper Marker	113.00

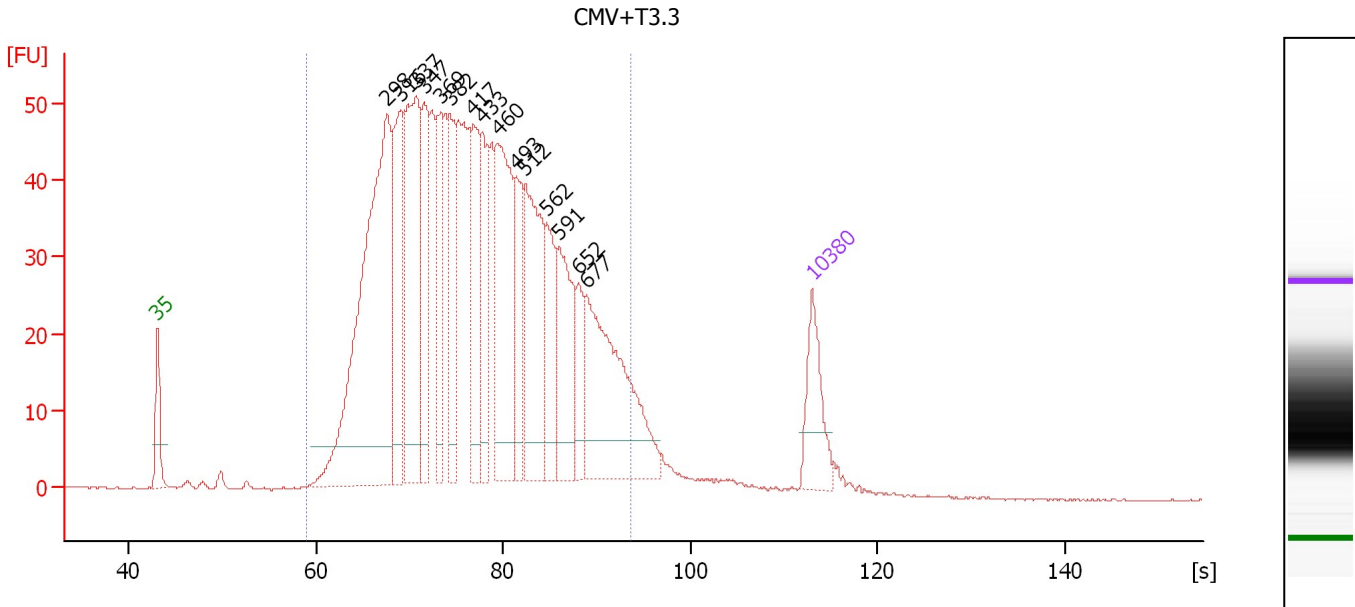
Region table for sample 4 : TRB1R429Q-T3.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Co lor
200	454	1,000	182.8	1,886.0	81	32.8	495.16	■

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : CMV+T3.3

Number of peaks found: 15 Corr. Area 1: 1,448.8
 Noise: 0.1

Peak table for sample 5 : CMV+T3.3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	298	733.61	3,723.7		67.56
3	316	187.53	898.7		68.99
4	337	328.10	1,476.1		70.66
5	347	169.28	739.7		71.46
6	369	128.45	527.8		73.24
7	382	132.70	526.9		74.27
8	417	148.16	538.0		76.80
9	433	133.42	467.4		77.71
10	460	270.70	891.3		79.38
11	493	118.97	365.9		81.33
12	512	238.52	706.2		82.30
13	562	109.26	294.4		84.60
14	591	151.72	388.7		85.92
15	652	61.57	143.1		87.98
16	677	305.90	684.6		88.79
17	10,380	75.00	10.9	Upper Marker	113.00

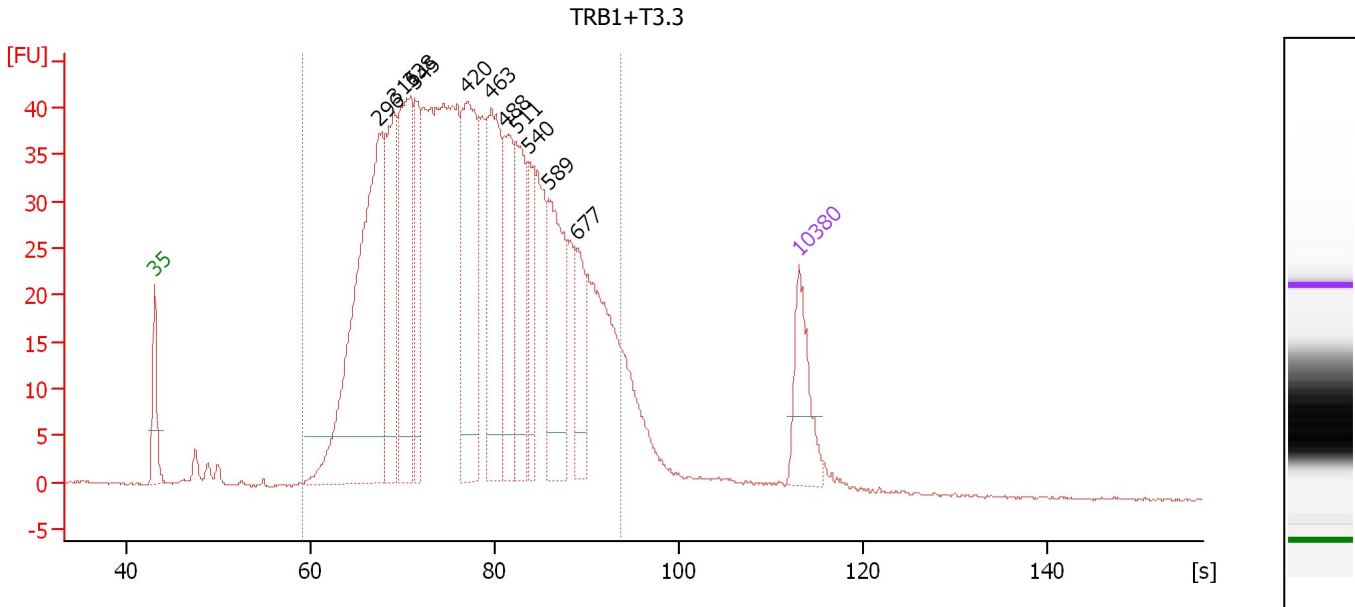
Region table for sample 5 : CMV+T3.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	446	1,000	1,448.8	15,576.5	95	34.4	3,981.85	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : TRB1+T3.3

Number of peaks found: 11 Corr. Area 1: 1,251.7
 Noise: 0.1

Peak table for sample 6 : TRB1+T3.3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	296	631.68	3,228.1		67.38
3	316	218.18	1,044.6		69.02
4	338	287.62	1,288.7		70.77
5	345	136.88	601.7		71.29
6	420	268.26	968.2		76.95
7	463	242.78	793.7		79.57
8	488	139.10	432.1		81.03
9	511	151.08	448.2		82.26
10	540	81.44	228.4		83.60
11	589	178.64	459.4		85.82
12	677	81.72	182.9		88.79
13	10,380	75.00	10.9	Upper Marker	113.00

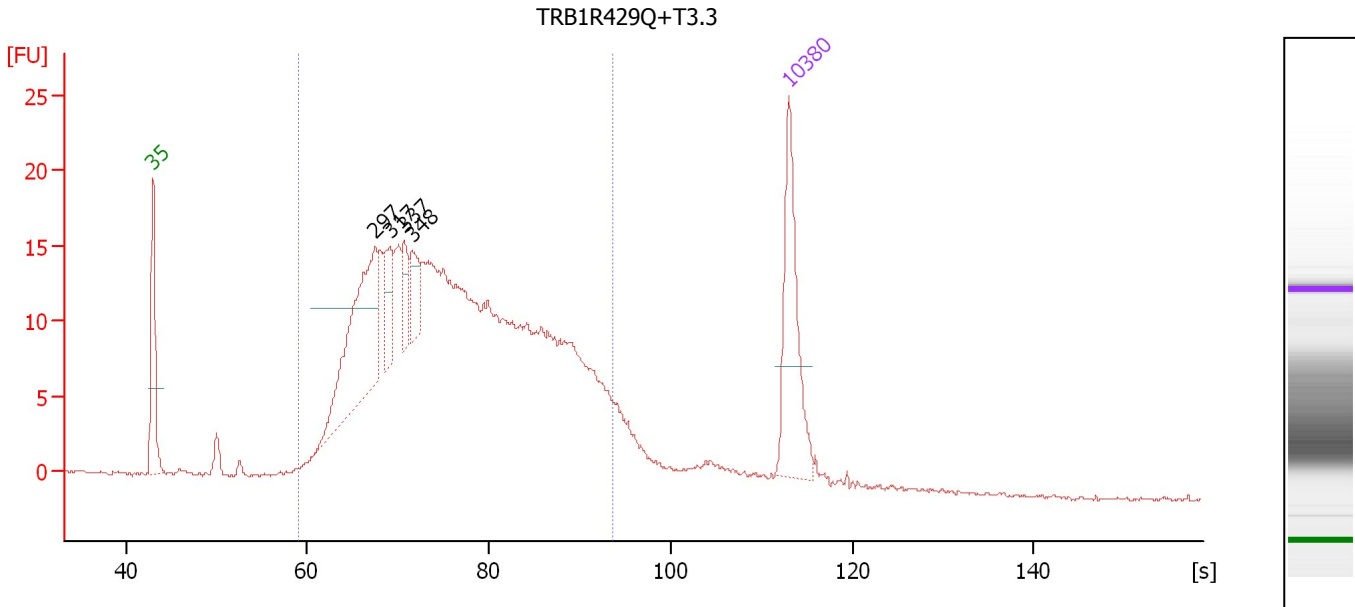
Region table for sample 6 : TRB1+T3.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	460	1,000	1,251.7	14,304.1	94	34.6	3,748.19	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
 Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : TRB1R429Q+T3.3

Number of peaks found: 4 Corr. Area 1: 449.8
 Noise: 0.1

Peak table for sample 7 : TRB1R429Q+T3.3

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	297	157.40	803.3		67.42
3	317	29.19	139.4		69.07
4	337	23.89	107.4		70.67
5	348	25.91	112.8		71.56
6	10,380	75.00	10.9	Upper Marker	113.00

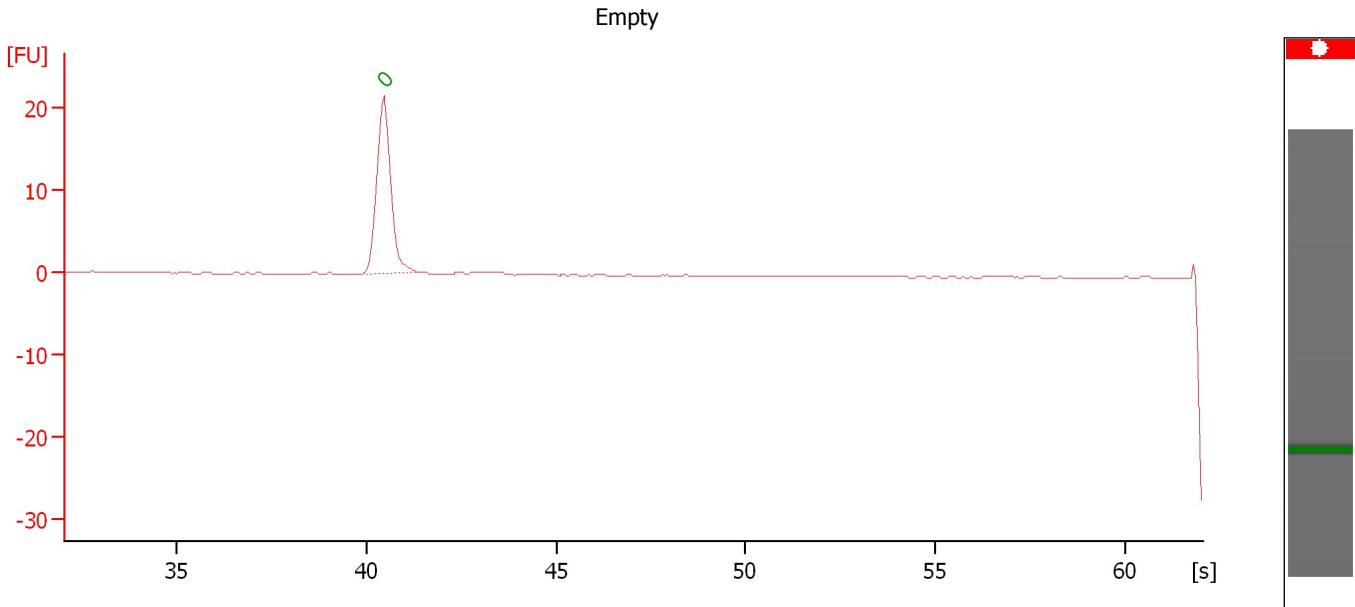
Region table for sample 7 : TRB1R429Q+T3.3

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
200	447	1,000	449.8	5,562.0	91	37.1	1,392.74	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
Modified: 5/18/2015 12:51:01 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : Empty

End Analysis Time Range [s] : 62.05

Overall Results for sample 8 : Empty

Number of peaks found: 0 Noise: 0.1

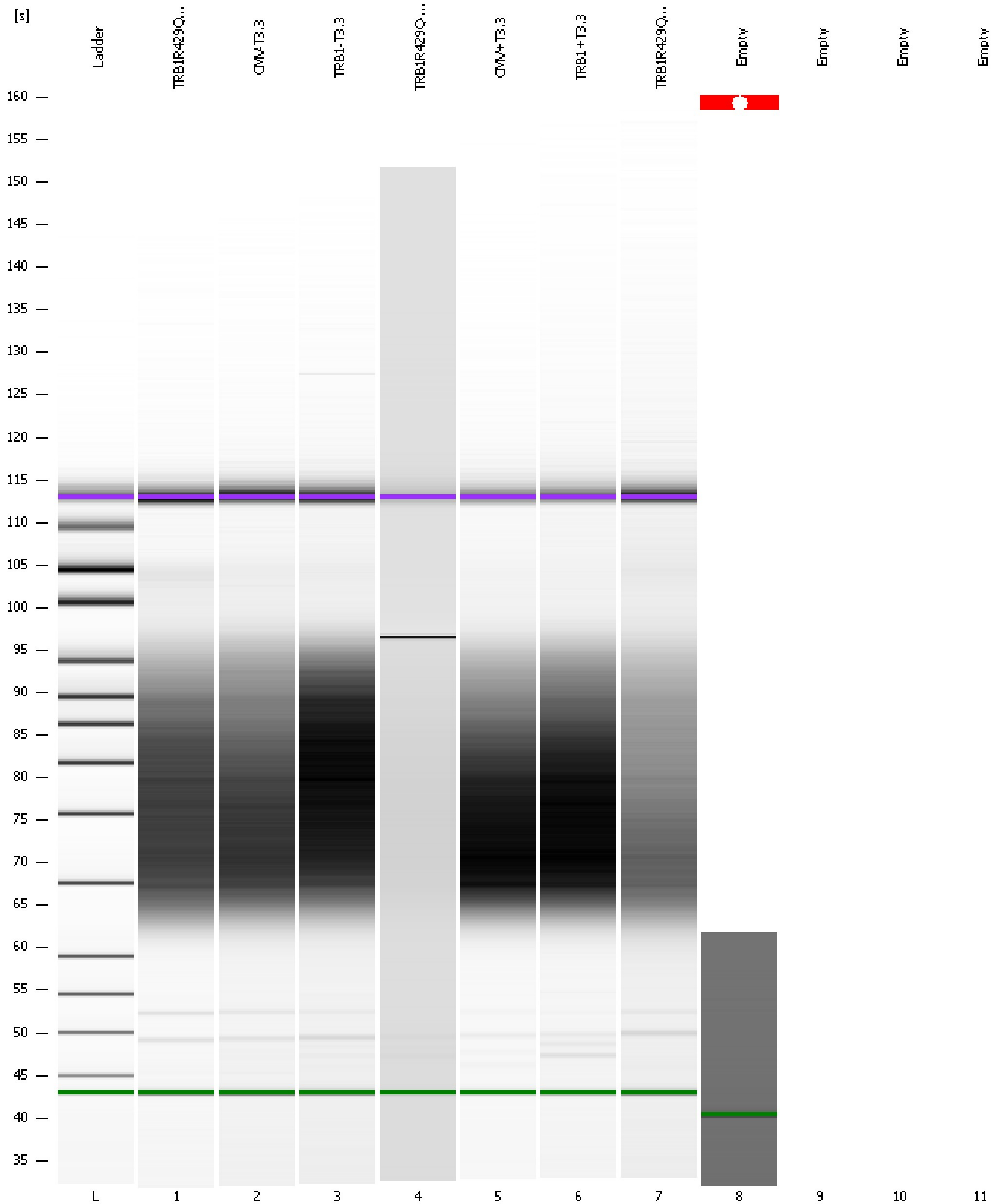
Peak table for sample 8 : Empty

Pea k	Size [bp]	Conc. [pg/ μ l]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	0	0.00	0.0	Lower Marker	40.45

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
Modified: 5/18/2015 12:51:01 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-18\2015-05-18_002.xad

Created: 5/18/2015 12:20:19 PM
Modified: 5/18/2015 12:51:01 PM

Invalid Samples

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.