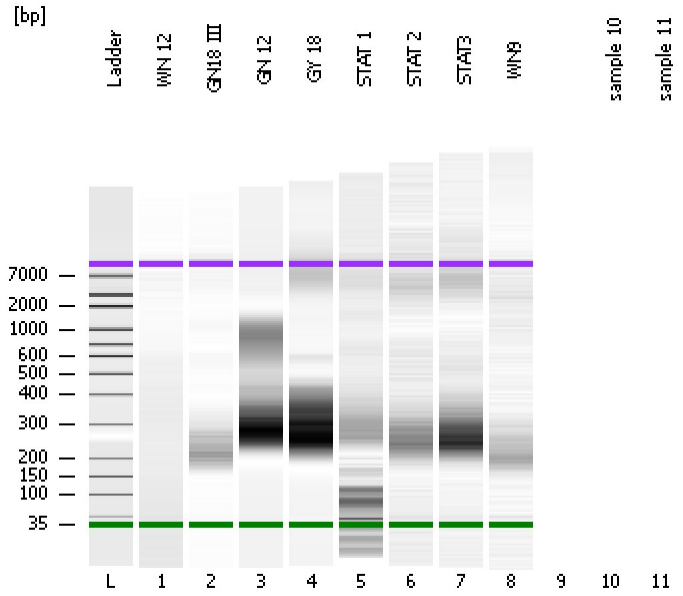
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 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\dsDNA\High Sensitivity DNA.xsy

Assay Class: High Sensitivity DNA Assay

Version: 1.03

Assay Comments: Copyright © 2003-2010 Agilent Technologies

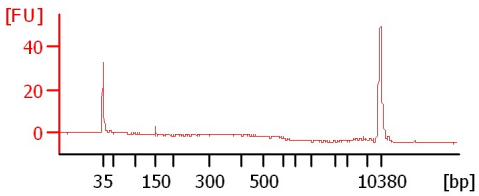
Chip Information:

Chip Lot #:

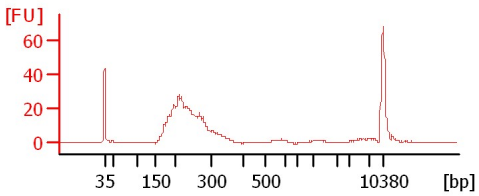
Reagent Kit Lot #:

Chip Comments:

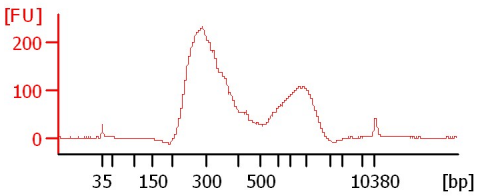
WN 12



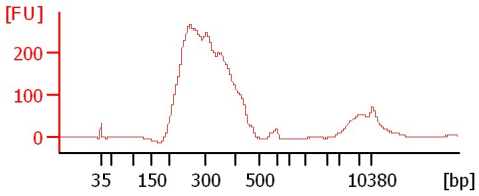
GN18 III



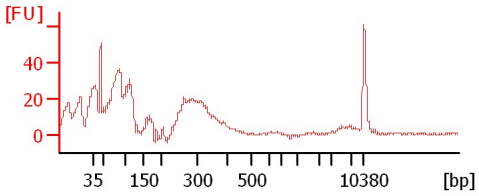
GN 12



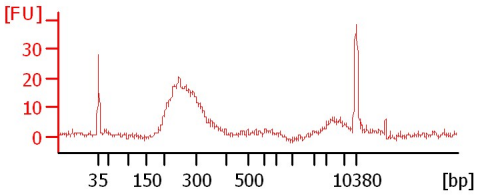
GY 18



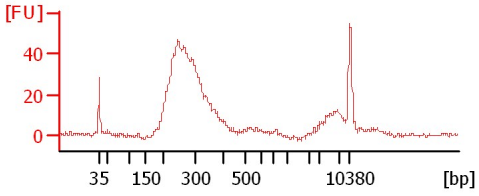
STAT 1



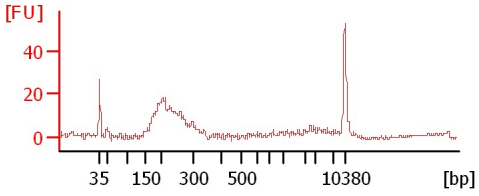
STAT 2



STAT3



WN9



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WN 12		☐	✔			
GN18 III		☐	✔			
GN 12		☐	✔			
GY 18		☐	✔			
STAT 1		☐	✔			
STAT 2		☐	✔			
STAT3		☐	✔			
WN9		☐	✔			
		☐				
sample 10		☐				
sample 11		☐				
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad
Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 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

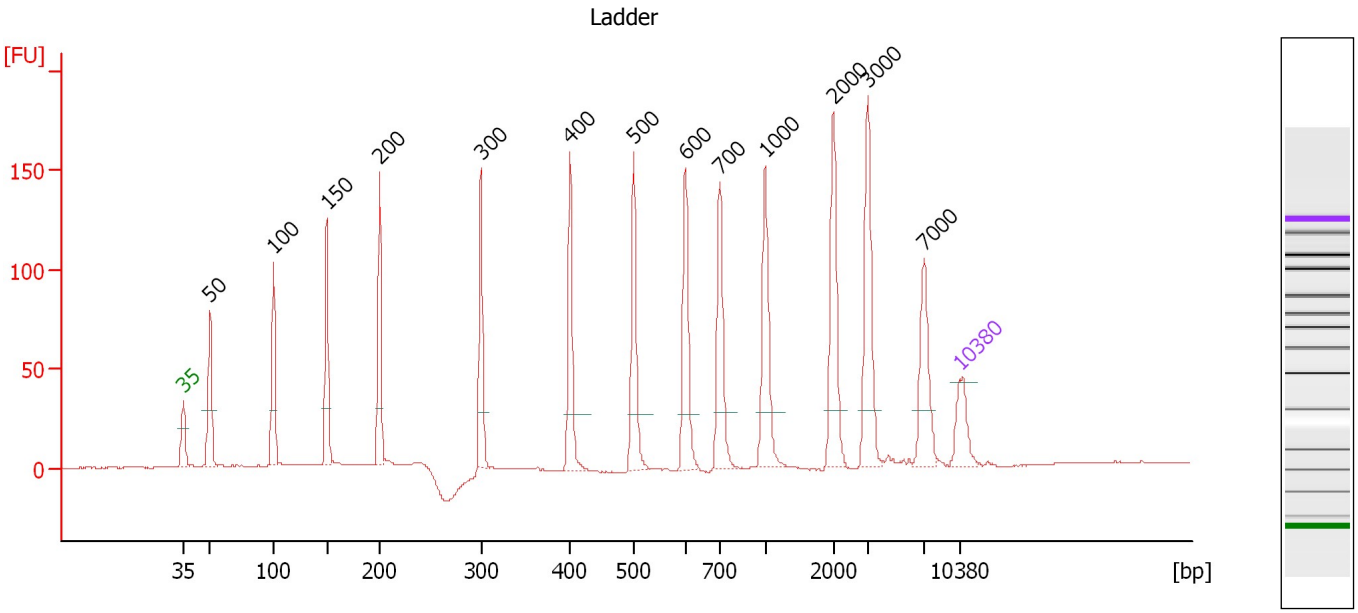
Ladder

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:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

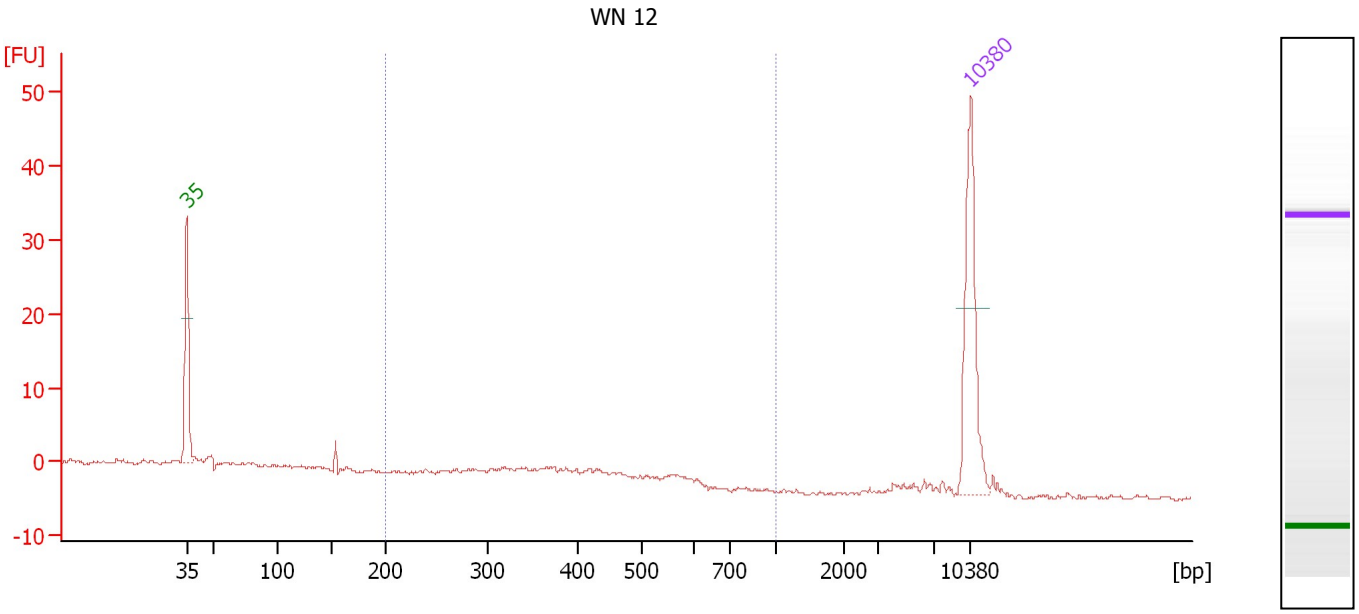
Peak table for Ladder

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	45.45
3		100	150.00	2,272.7	Ladder Peak	51.17
4		150	150.00	1,515.2	Ladder Peak	55.98
5		200	150.00	1,136.4	Ladder Peak	60.74
6		300	150.00	757.6	Ladder Peak	69.88
7		400	150.00	568.2	Ladder Peak	77.90
8		500	150.00	454.5	Ladder Peak	83.63
9		600	150.00	378.8	Ladder Peak	88.29
10		700	150.00	324.7	Ladder Peak	91.41
11		1,000	150.00	227.3	Ladder Peak	95.50
12		2,000	150.00	113.6	Ladder Peak	101.65
13		3,000	150.00	75.8	Ladder Peak	104.73
14		7,000	150.00	32.5	Ladder Peak	109.78
15		10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WN 12

Number of peaks found:	0	Corr. Area 1:	20.8
Noise:	0.2		

Peak table for sample 1 : WN 12

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	10,380	75.00	10.9	Upper Marker	113.00

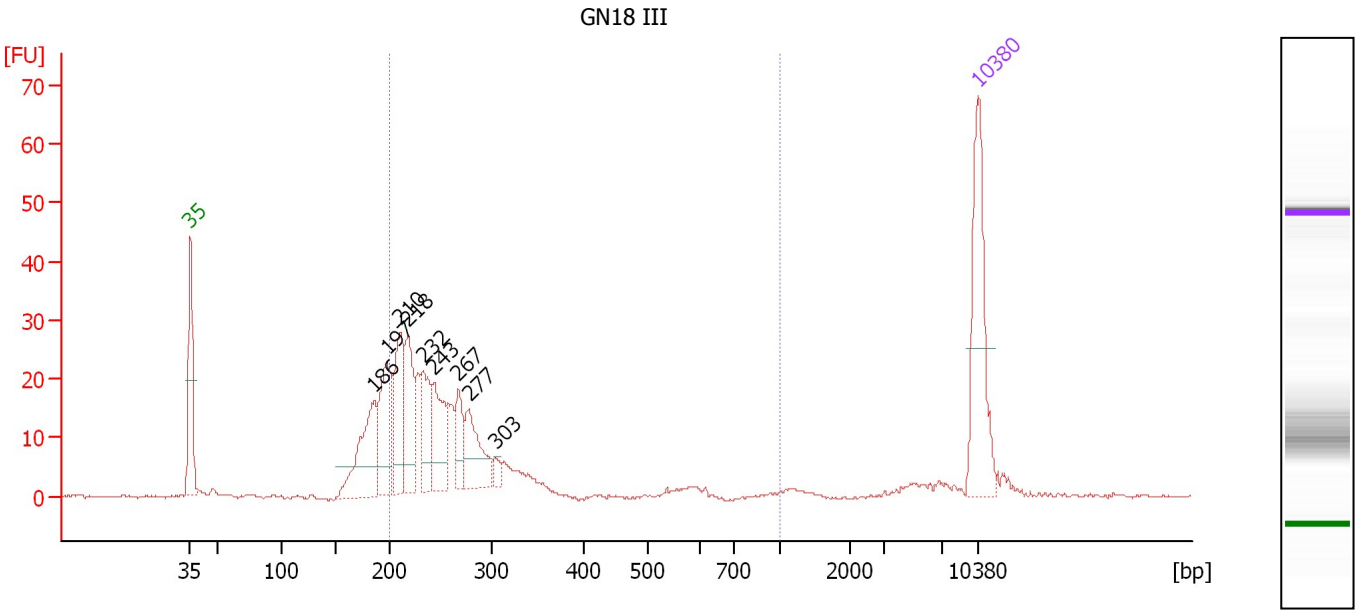
Region table for sample 1 : WN 12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	393	20.8	191.9	46.33	57	22.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : GN18 III

Number of peaks found:	9	Corr. Area 1:	289.2
Noise:	0.2		

Peak table for sample 2 : GN18 III

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	186	90.51	739.2		59.36
3	197	80.42	618.6		60.45
4	210	72.36	521.2		61.69
5	218	68.52	477.1		62.35
6	232	51.37	335.3		63.68
7	243	60.01	374.9		64.63
8	267	31.43	178.4		66.86
9	277	52.27	286.1		67.76
10	303	8.42	42.2		70.08
11	10,380	75.00	10.9	Upper Marker	113.00

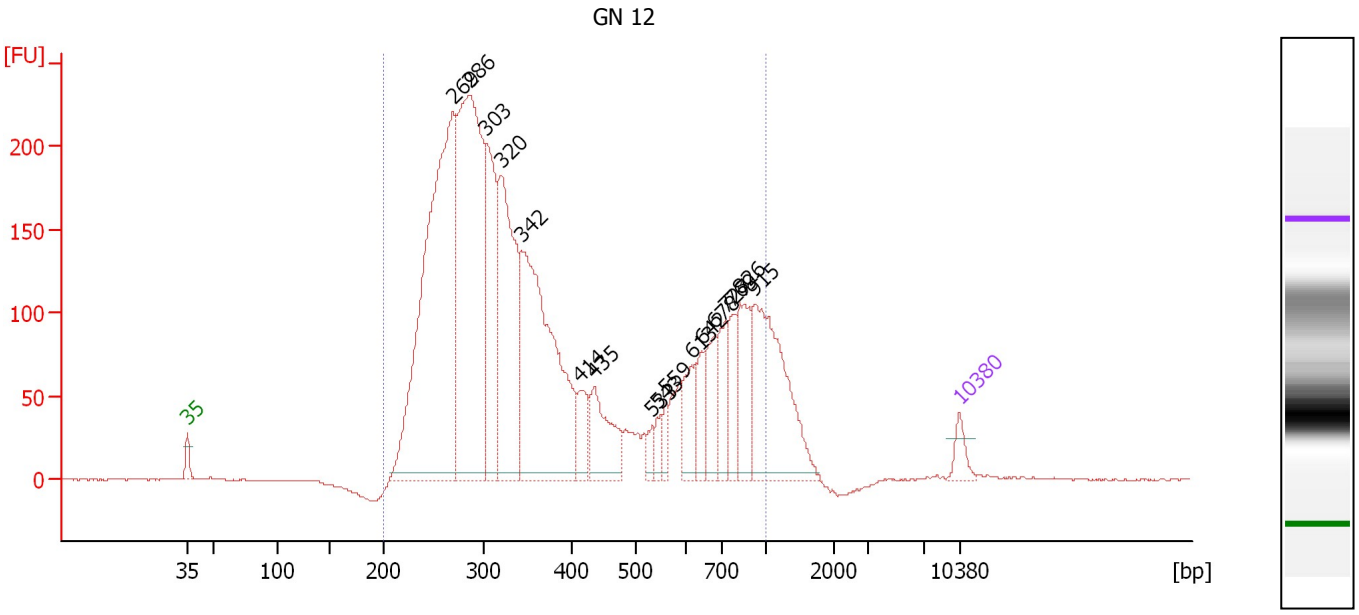
Region table for sample 2 : GN18 III

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	264	289.2	2,955.6	487.66	72	31.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : GN 12

Number of peaks found:	17	Corr. Area 1:	4,533.1
Noise:	0.3		

Peak table for sample 3 : GN 12

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	269	3,286.06	18,485.3		67.07
3	286	2,676.76	14,193.2		68.57
4	303	894.72	4,473.3		70.12
5	320	1,365.85	6,468.9		71.47
6	342	1,938.39	8,582.8		73.26
7	414	212.61	779.0		78.68
8	435	403.22	1,405.7		79.89
9	533	67.97	193.3		85.15
10	543	76.27	212.8		85.64
11	559	81.82	221.9		86.36
12	613	229.09	566.6		88.68
13	642	182.27	430.1		89.60
14	678	251.20	561.7		90.71
15	727	235.72	491.5		91.78
16	769	219.93	433.2		92.36
17	826	368.25	675.4		93.13
18	915	932.24	1,544.0		94.34
19	10,380	75.00	10.9	Upper Marker	113.00

Region table for sample 3 : GN 12

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	417	4,533.1	60,087.0	13,204.60	94	47.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

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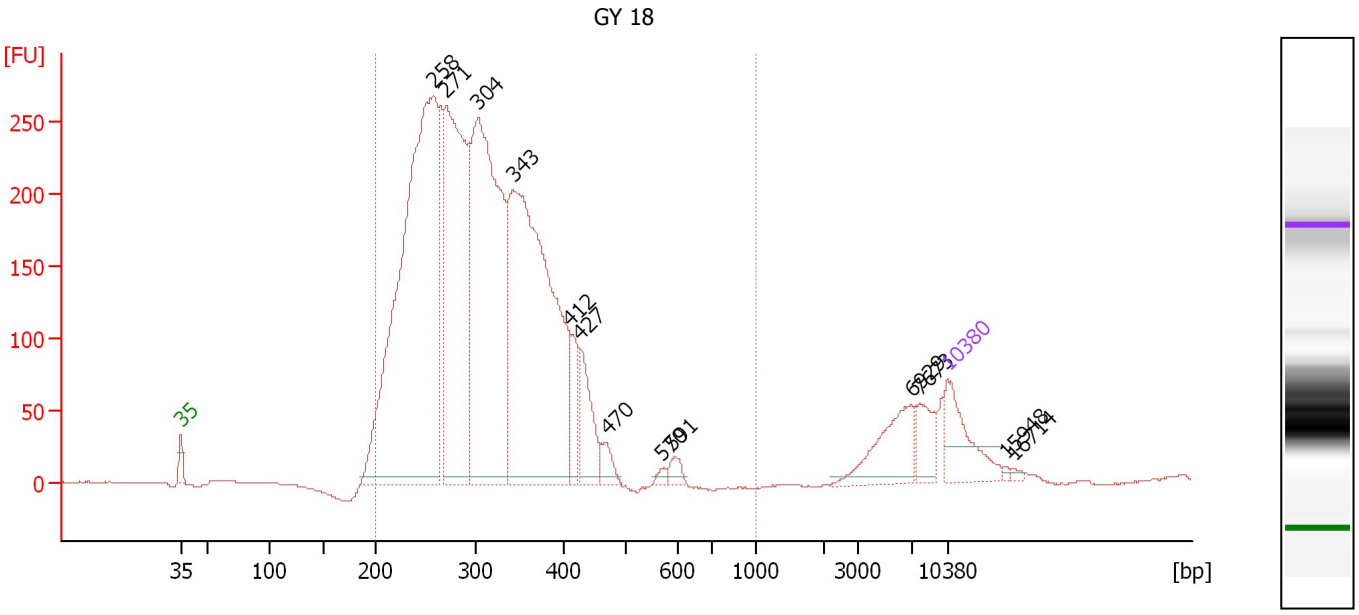

Overall Results for sample 4 : GY 18

Number of peaks found:	13	Corr. Area 1:	5,253.3
Noise:	0.3		

Peak table for sample 4 : GY 18

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	258	1,273.38	7,467.0		66.07
3	271	653.68	3,652.4		67.24
4	304	833.39	4,159.3		70.16
5	343	907.29	4,007.9		73.33
6	412	62.76	230.9		78.58
7	427	100.32	355.8		79.46
8	470	29.68	95.7		81.89
9	570	8.59	22.8		86.91
10	591	16.05	41.1		87.88
11	6,929	94.78	20.7		109.69
12	7,673	43.19	8.5		110.42
13	10,380	75.00	10.9	Upper Marker	113.00
14	15,948	0.00	0.0		118.31
15	16,714	0.00	0.0		119.04

Region table for sample 4 : GY 18

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	309	5,253.3	20,072.7	3,881.89	94	20.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

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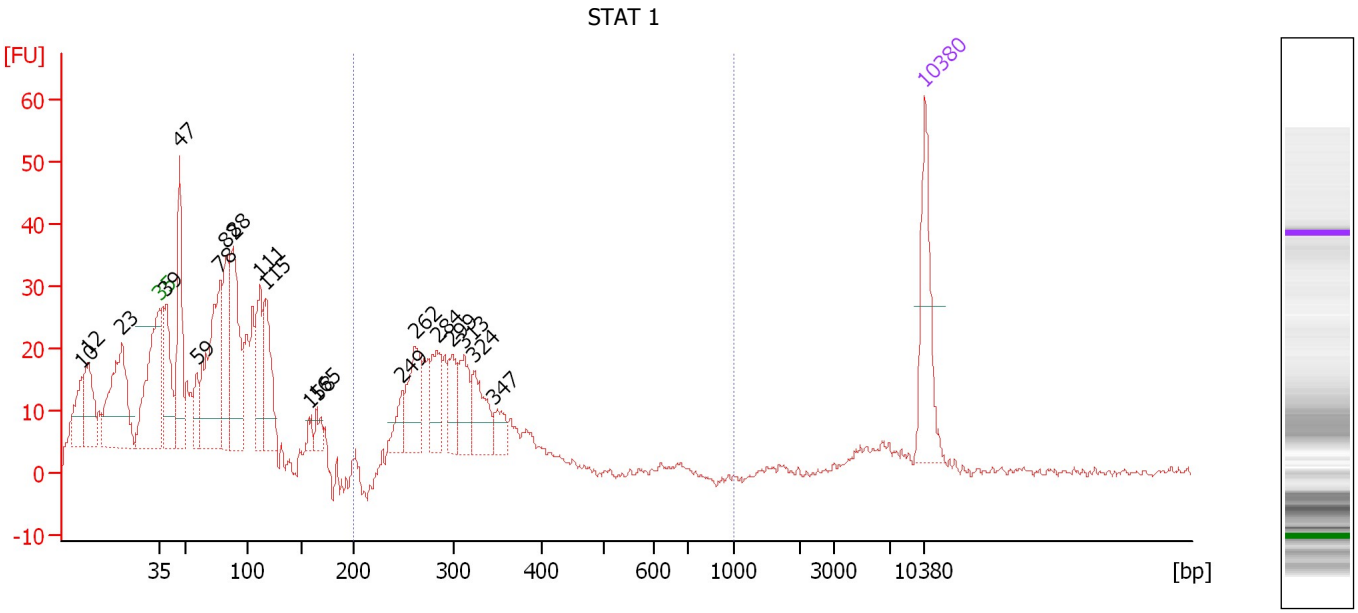

Overall Results for sample 5 : STAT 1

Number of peaks found:	20	Corr. Area 1:	153.4
Noise:	0.6		

Peak table for sample 5 : STAT 1

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	10	0.00	0.0		35.98
2	12	0.00	0.0		36.52
3	23	0.00	0.0		39.64
4	35	125.00	5,411.3	Lower Marker	43.00
5	39	137.44	5,356.5		43.63
6	47	158.87	5,162.3		44.90
7	59	44.28	1,140.6		46.46
8	78	242.94	4,745.7		48.61
9	82	125.84	2,330.2		49.09
10	88	198.94	3,433.5		49.78
11	111	93.17	1,273.8		52.21
12	115	108.83	1,429.2		52.65
13	158	14.41	138.2		56.75
14	165	22.66	208.4		57.38
15	249	29.68	180.5		65.23
16	262	85.00	491.7		66.40
17	284	61.34	327.4		68.40
18	299	44.37	225.0		69.76
19	313	51.91	251.6		70.88
20	324	61.15	285.9		71.81
21	347	24.81	108.3		73.66
22	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay Created: 8/5/2016 2:42:10 PM
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad Modified: 8/5/2016 3:31:20 PM

Electropherogram Summary Continued ...

... Region table for sample 5 : STAT 1

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	297	153.4	1,767.0	342.33	25	10.8

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

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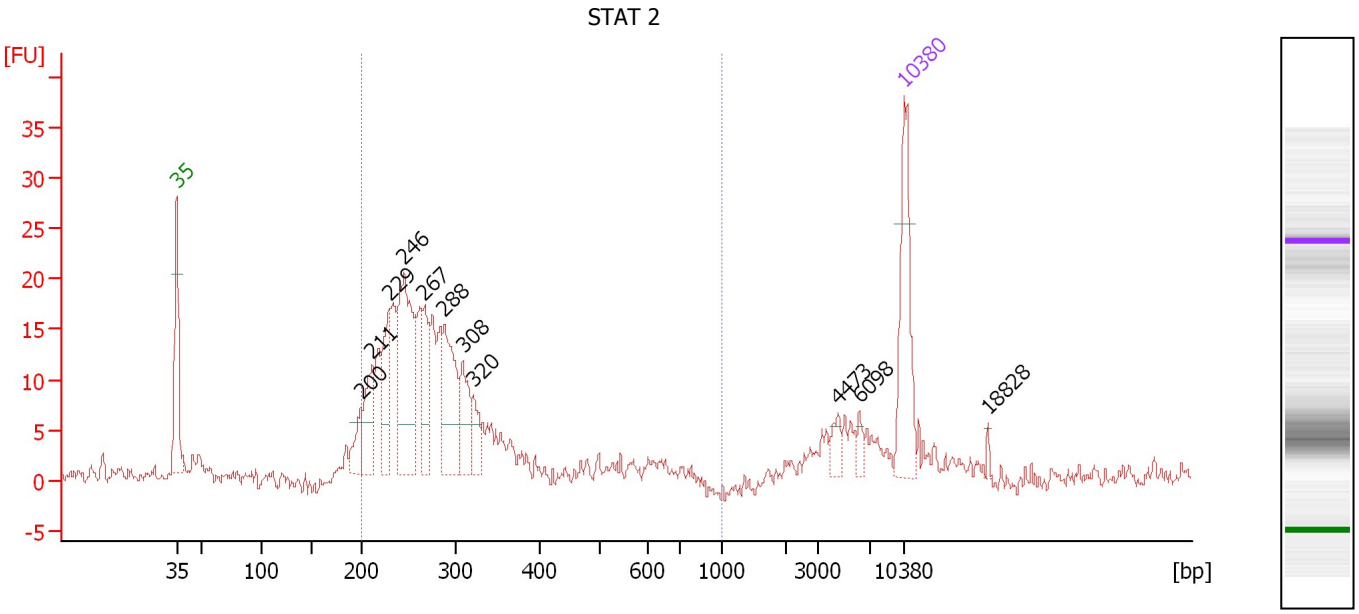

Overall Results for sample 6 : STAT 2

Number of peaks found:	11	Corr. Area 1:	246.5
Noise:	0.9		

Peak table for sample 6 : STAT 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	200	28.74	217.7		60.74
3	211	61.77	443.0		61.77
4	229	65.87	435.4		63.41
5	246	167.75	1,035.3		64.90
6	267	53.87	305.9		66.85
7	288	95.63	503.8		68.74
8	308	49.05	241.1		70.54
9	320	27.94	132.1		71.51
10	4,473	12.20	4.1		106.59
11	6,098	8.16	2.0		108.64
12	10,380	75.00	10.9	Upper Marker	113.00
13	18,828	0.00	0.0		121.05

Region table for sample 6 : STAT 2

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	279	246.5	4,820.5	847.71	82	25.5

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
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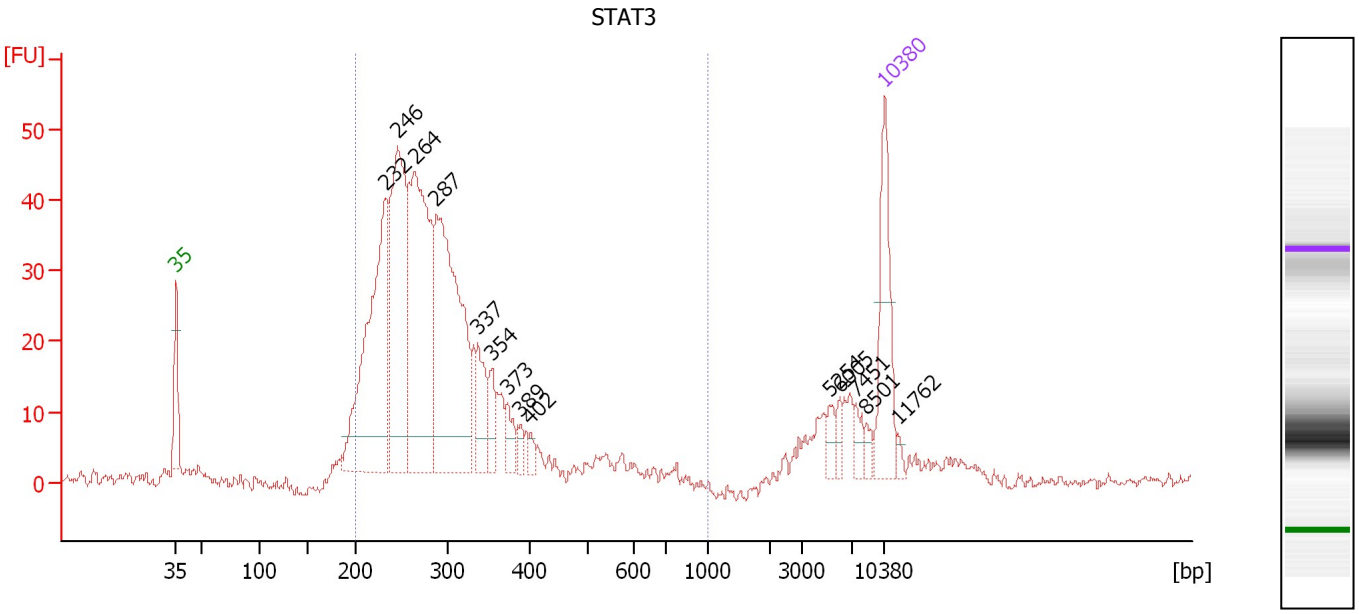

Overall Results for sample 7 : STAT3

Number of peaks found:	14	Corr. Area 1:	678.4
Noise:	0.6		

Peak table for sample 7 : STAT3

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	232	316.34	2,067.6		63.65
3	246	272.81	1,682.6		64.91
4	264	330.36	1,895.2		66.60
5	287	338.46	1,785.7		68.70
6	337	54.17	243.8		72.81
7	354	28.69	122.9		74.18
8	373	22.31	90.6		75.76
9	389	12.13	47.3		77.03
10	402	8.42	31.7		78.03
11	5,254	11.71	3.4		107.57
12	6,005	9.71	2.4		108.52
13	7,451	12.28	2.5		110.21
14	8,501	7.09	1.3		111.21
15	10,380	75.00	10.9	Upper Marker	113.00
16	11,762	0.00	0.0		114.32

Region table for sample 7 : STAT3

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color Conc. [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	292	678.4	8,329.9	1,517.17	86	25.9

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

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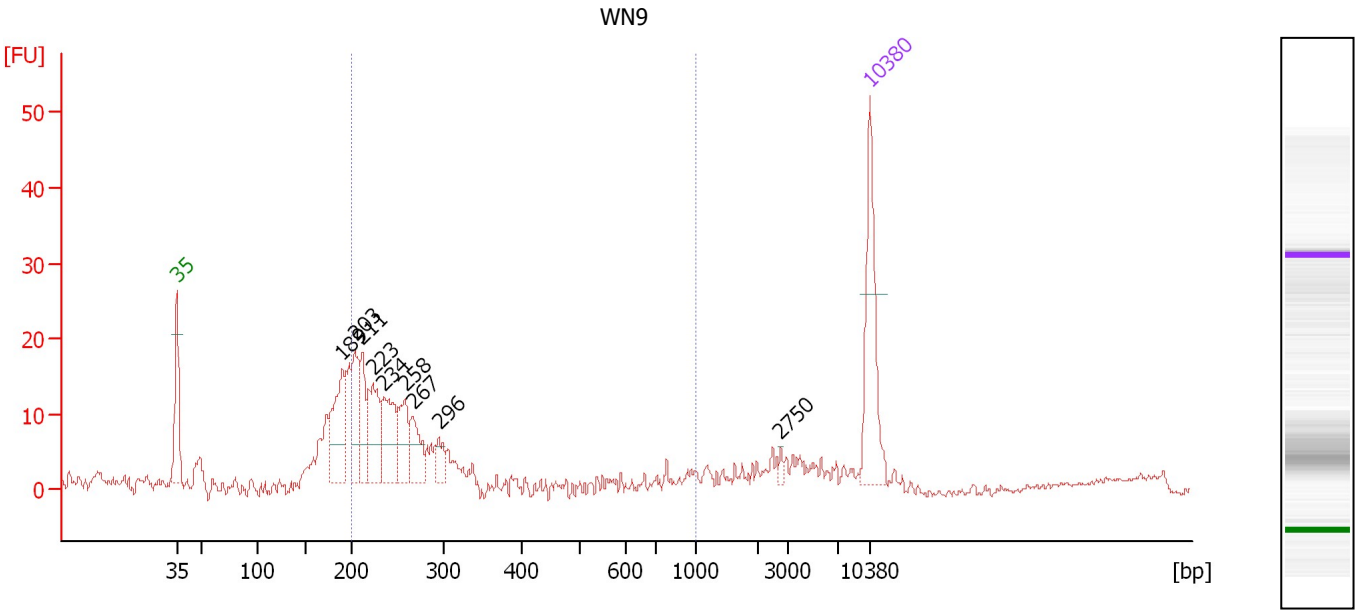
Electropherogram Summary Continued ...



Overall Results for sample 8 : WN9

Number of peaks found:	9	Corr. Area 1:	156.1
Noise:	0.4		

Peak table for sample 8 : WN9

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		189	92.71	741.6		59.73
3		203	57.55	429.3		61.02
4		211	50.02	359.6		61.72
5		223	73.39	498.3		62.85
6		234	72.78	471.8		63.82
7		258	44.74	262.8		66.03
8		267	41.09	233.4		66.84
9		296	21.28	109.1		69.47
10		2,750	4.04	2.2		103.96
11	▶	10,380	75.00	10.9	Upper Marker	113.00

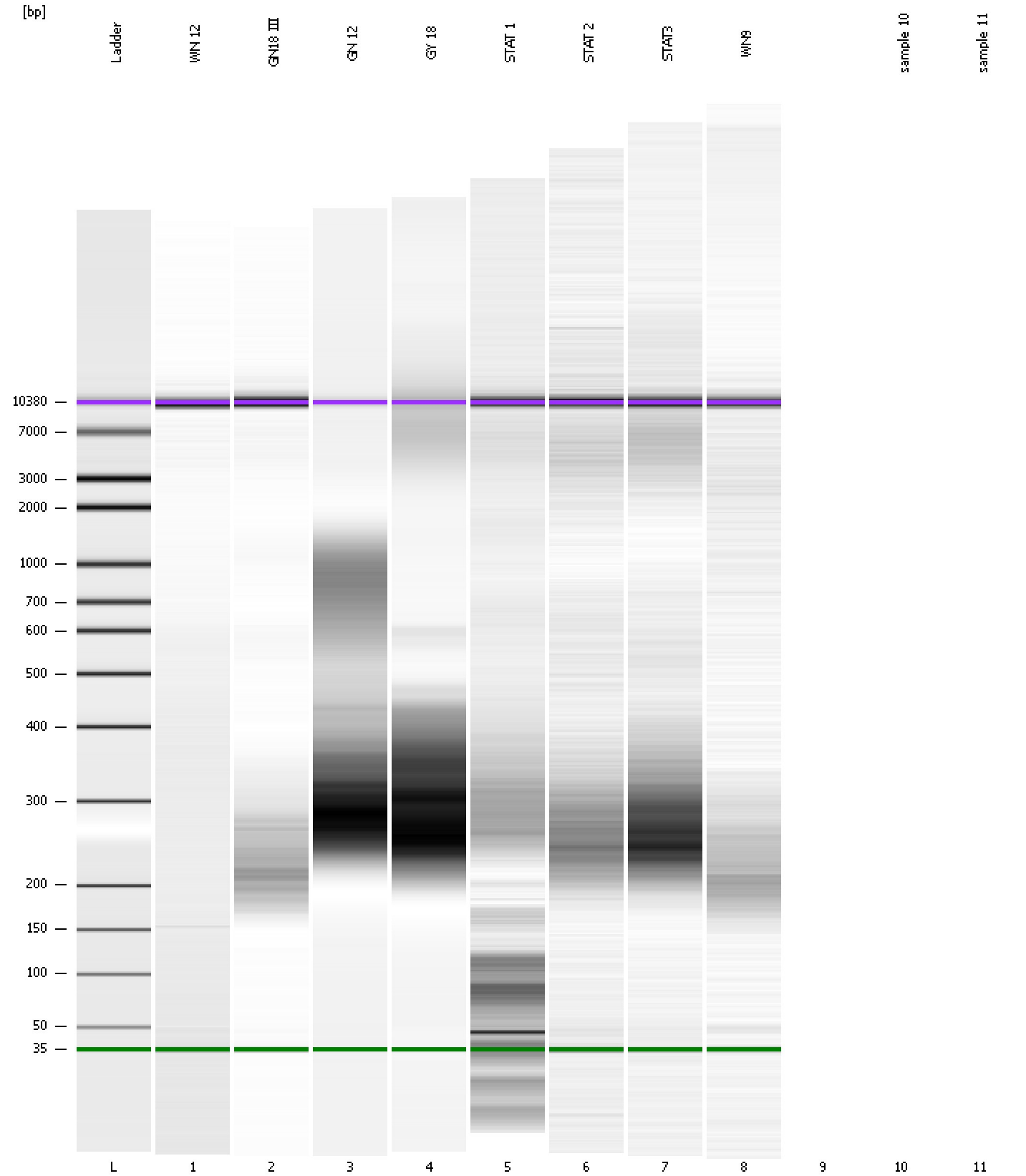
Region table for sample 8 : WN9

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Color [pg/µl]	% of Total	Size distribution in CV [%]
200	1,000	285	156.1	2,594.0	430.28	56	50.4

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 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.

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...alyzer\2100 expert\data\2016-08-05\2016-08-05_DW_SINGER.xad

Created: 8/5/2016 2:42:10 PM
Modified: 8/5/2016 3:31:20 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 9)		Instrument	Run		8/5/2016 3:14:55 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\data\2016-08-05\2016-08-05_002.xad)		Instrument	Run		8/5/2016 2:42:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/5/2016 2:42:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/5/2016 2:42:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/5/2016 2:42:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/5/2016 2:42:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/5/2016 2:42:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/5/2016 2:42:16 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1