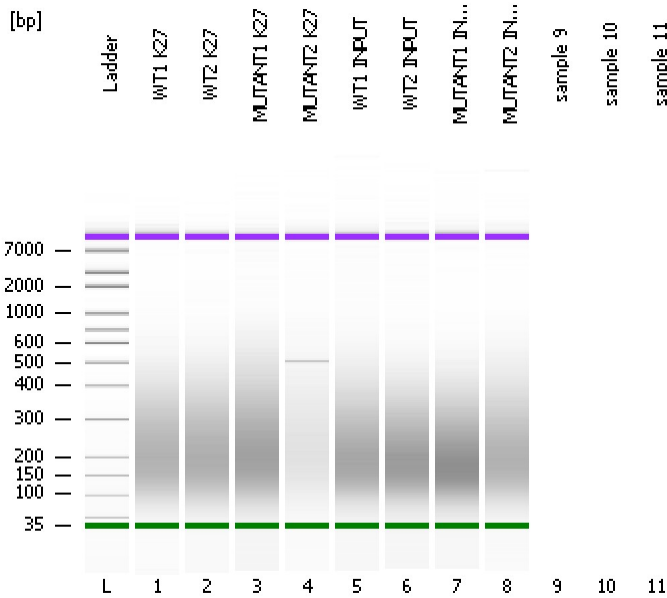


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
Modified: 5/21/2013 9:46:52 AM

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

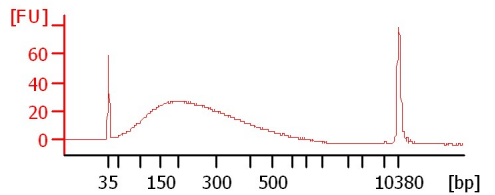
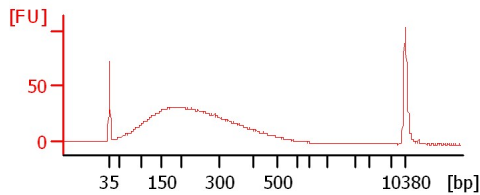
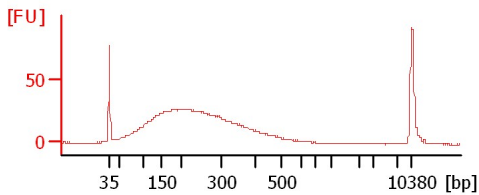
Chip Information:

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

WT1 K27

WT2 K27

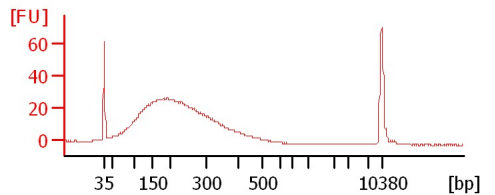
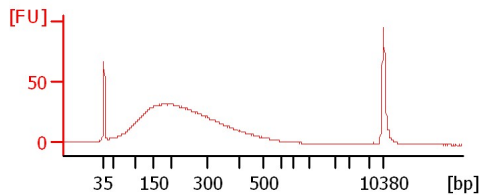
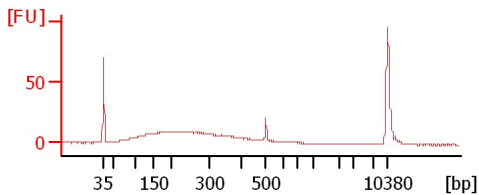
MUTANT1 K27



MUTANT2 K27

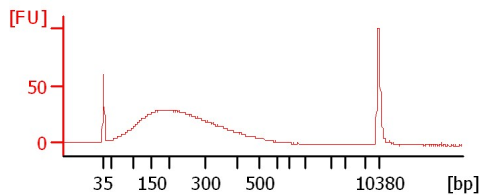
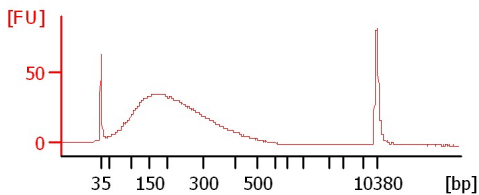
WT1 INPUT

WT2 INPUT



MUTANT1 INPUT

MUTANT2 INPUT



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
WT1 K27		<input type="checkbox"/>	✓			
WT2 K27		<input type="checkbox"/>	✓			
MUTANT1 K27		<input type="checkbox"/>	✓			
MUTANT2 K27		<input type="checkbox"/>	✓			
WT1 INPUT		<input type="checkbox"/>	✓			
WT2 INPUT		<input type="checkbox"/>	✓			
MUTANT1 INPUT		<input type="checkbox"/>	✓			
MUTANT2 INPUT		<input type="checkbox"/>	✓			
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<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\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

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

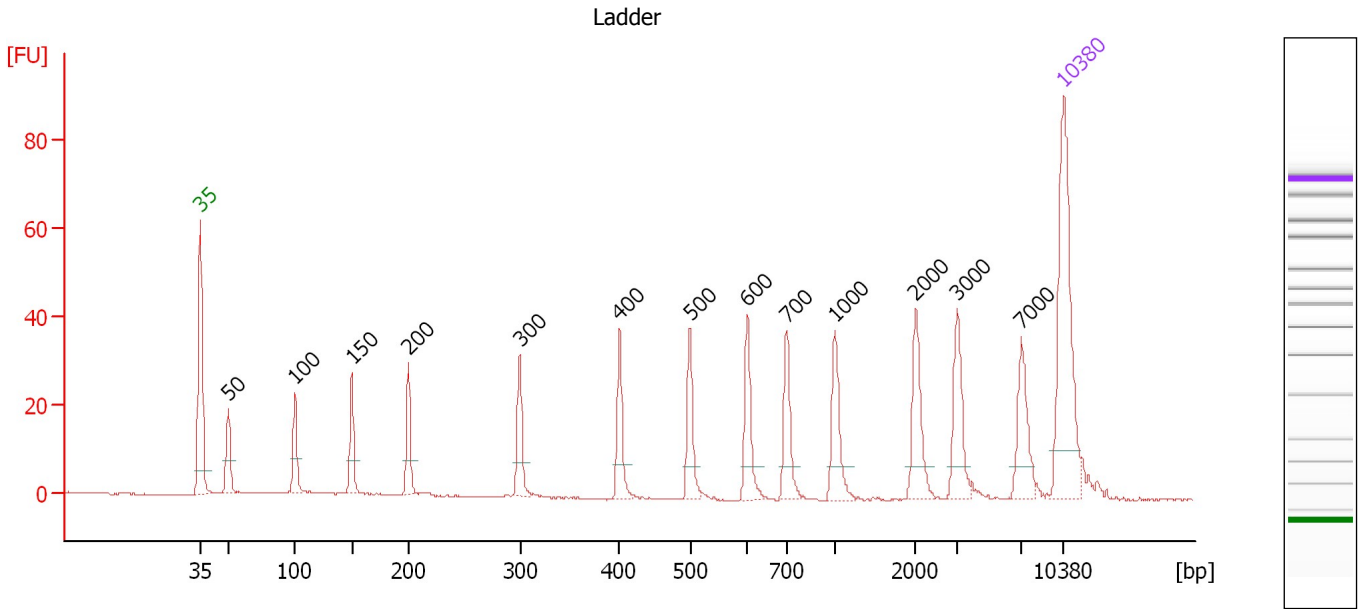
Ladder

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\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.2

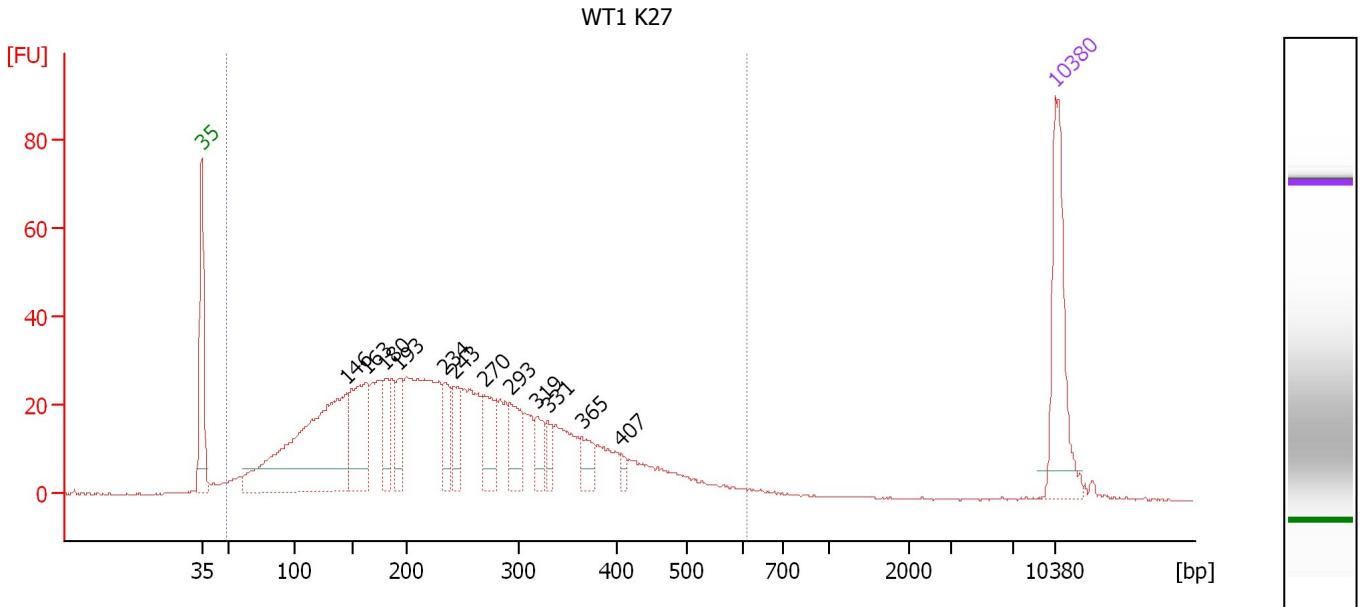
Peak table for Ladder

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	50	150.00	4,545.5	Ladder Peak
3	100	150.00	2,272.7	Ladder Peak
4	150	150.00	1,515.2	Ladder Peak
5	200	150.00	1,136.4	Ladder Peak
6	300	150.00	757.6	Ladder Peak
7	400	150.00	568.2	Ladder Peak
8	500	150.00	454.5	Ladder Peak
9	600	150.00	378.8	Ladder Peak
10	700	150.00	324.7	Ladder Peak
11	1,000	150.00	227.3	Ladder Peak
12	2,000	150.00	113.6	Ladder Peak
13	3,000	150.00	75.8	Ladder Peak
14	7,000	150.00	32.5	Ladder Peak
15	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 1 : WT1 K27

Number of peaks found: 12 Corr. Area 1: 1,034.9
 Noise: 0.2

Peak table for sample 1 : WT1 K27

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	146	322.58	3,351.7	
3	163	111.49	1,036.7	
4	180	40.39	340.7	
5	193	38.71	304.6	
6	234	35.05	226.9	
7	243	40.02	249.8	
8	270	50.36	282.3	
9	293	42.35	219.0	
10	319	25.17	119.7	
11	331	15.03	68.9	
12	365	22.79	94.5	
13	407	6.39	23.8	
14	10,380	75.00	10.9	Upper Marker

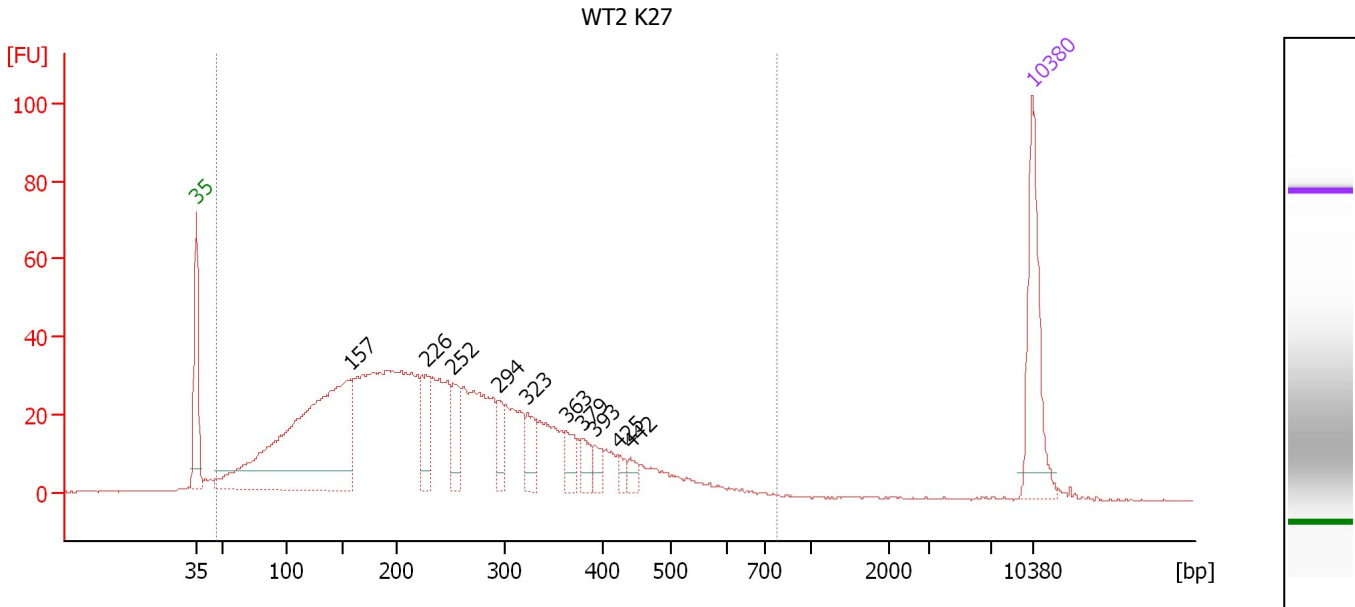
Region table for sample 1 : WT1 K27

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
49	608	244	11,821.7	1,393.24	1,034.9	99	43.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : WT2 K27

Number of peaks found: 10 Corr. Area 1: 1,309.5
 Noise: 0.2

Peak table for sample 2 : WT2 K27

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	157	473.28	4,573.5	
3	226	54.50	364.8	
4	252	42.12	253.2	
5	294	28.27	145.7	
6	323	32.22	151.3	
7	363	25.71	107.2	
8	379	17.12	68.4	
9	393	14.82	57.2	
10	425	9.20	32.8	
11	442	10.02	34.4	
12	10,380	75.00	10.9	Upper Marker

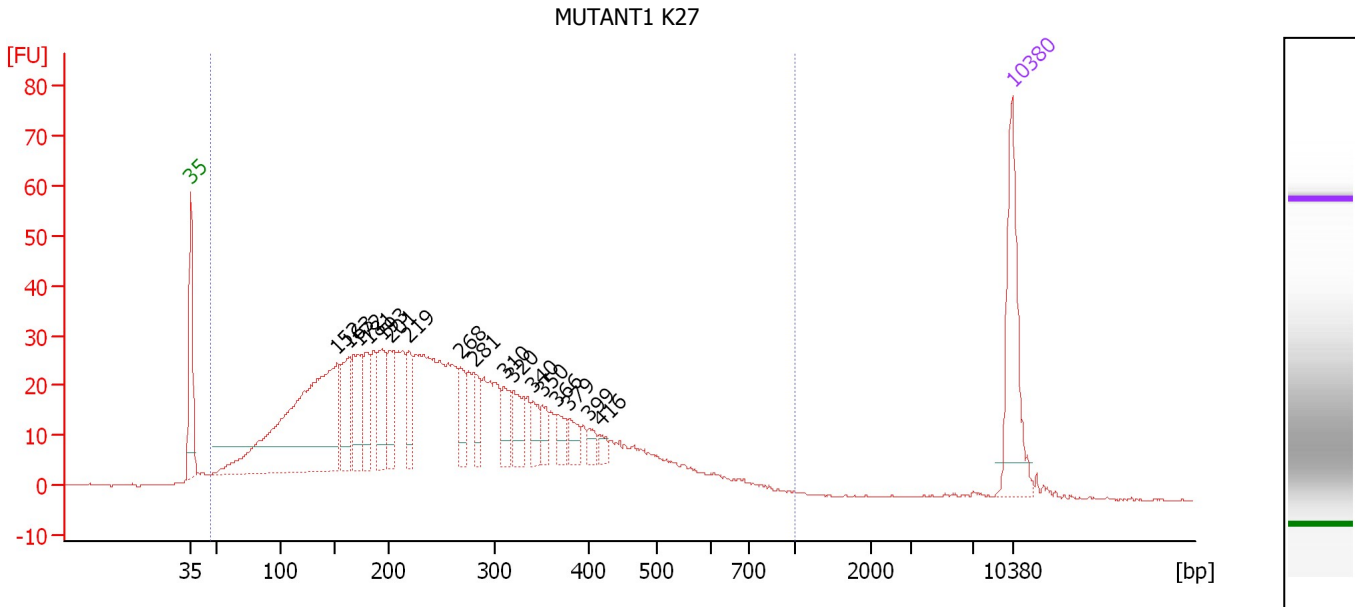
Region table for sample 2 : WT2 K27

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
46	778	247	14,919.3	1,706.78	1,309.5	98	46.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : MUTANT1 K27

Number of peaks found: 17 Corr. Area 1: 1,194.1
 Noise: 0.2

Peak table for sample 3 : MUTANT1 K27

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	152	389.65	3,875.9	
3	163	68.62	637.0	
4	172	66.08	583.3	
5	181	51.36	431.0	
6	193	56.94	446.0	
7	201	48.66	366.1	
8	219	39.28	271.8	
9	268	29.35	166.1	
10	281	28.41	153.3	
11	310	28.79	140.7	
12	320	33.16	157.2	
13	340	20.22	90.0	
14	350	17.19	74.3	
15	366	17.60	72.9	
16	379	15.56	62.3	
17	399	10.64	40.4	
18	416	7.71	28.1	
19	10,380	75.00	10.9	Upper Marker

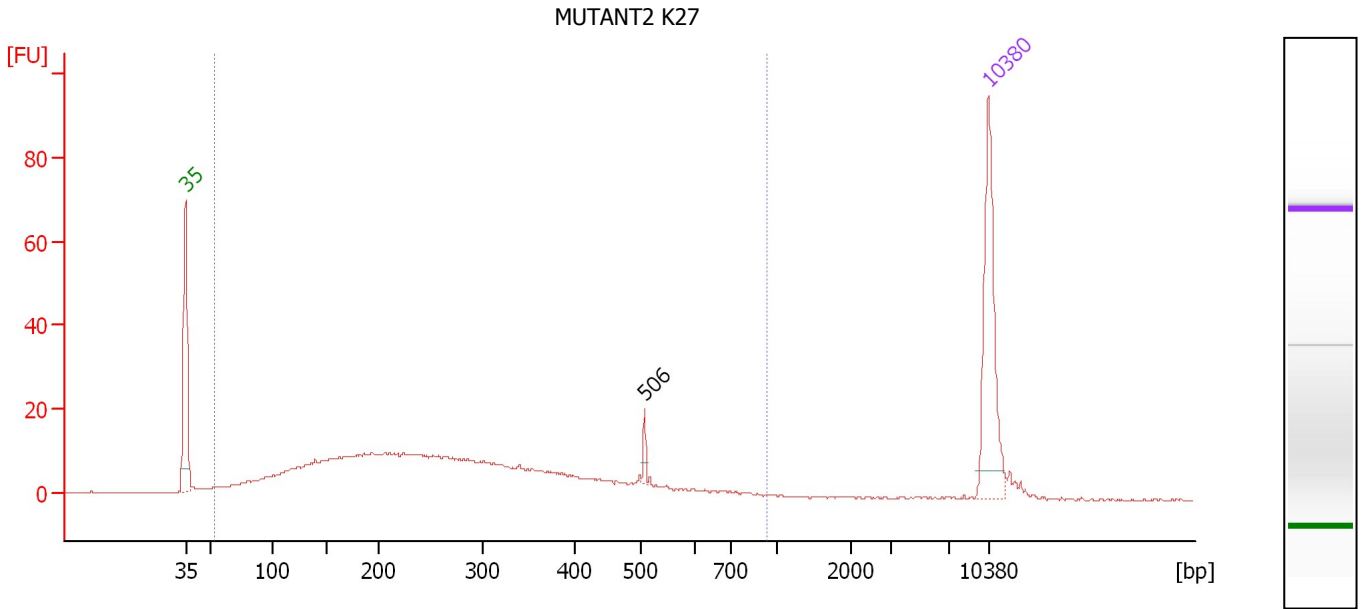
Region table for sample 3 : MUTANT1 K27

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
46	1,000	264	16,706.3	1,992.65	1,194.1	98	49.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : MUTANT2 K27

Number of peaks found: 1 Corr. Area 1: 433.9
 Noise: 0.2

Peak table for sample 4 : MUTANT2 K27

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	506	7.36	22.0	
3	10,380	75.00	10.9	Upper Marker

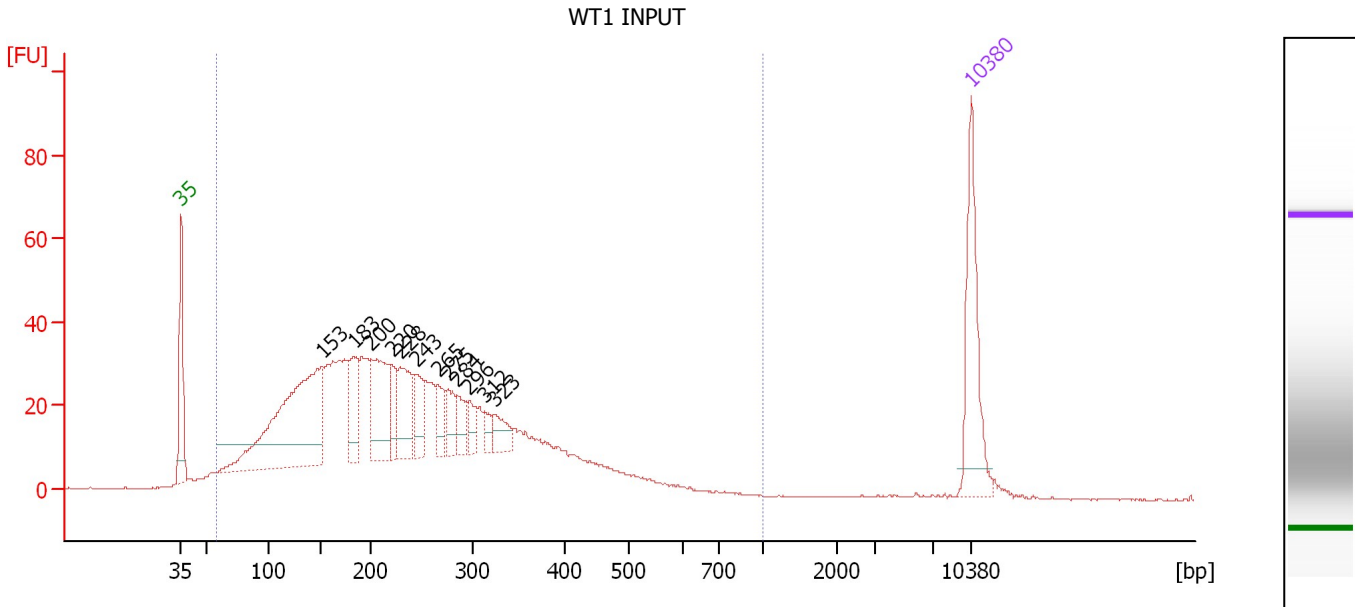
Region table for sample 4 : MUTANT2 K27

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
52	941	280	5,083.9	633.83	433.9	95	50.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : WT1 INPUT

Number of peaks found: 12 Corr. Area 1: 1,200.5
 Noise: 0.2

Peak table for sample 5 : WT1 INPUT

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	153	321.39	3,191.2	
3	183	56.69	469.3	
4	200	98.61	747.0	
5	220	35.21	242.7	
6	228	67.91	450.9	
7	243	39.22	244.2	
8	265	27.89	159.6	
9	275	28.04	154.7	
10	284	23.03	122.8	
11	296	17.46	89.5	
12	312	12.47	60.5	
13	323	24.44	114.8	
14	10,380	75.00	10.9	Upper Marker

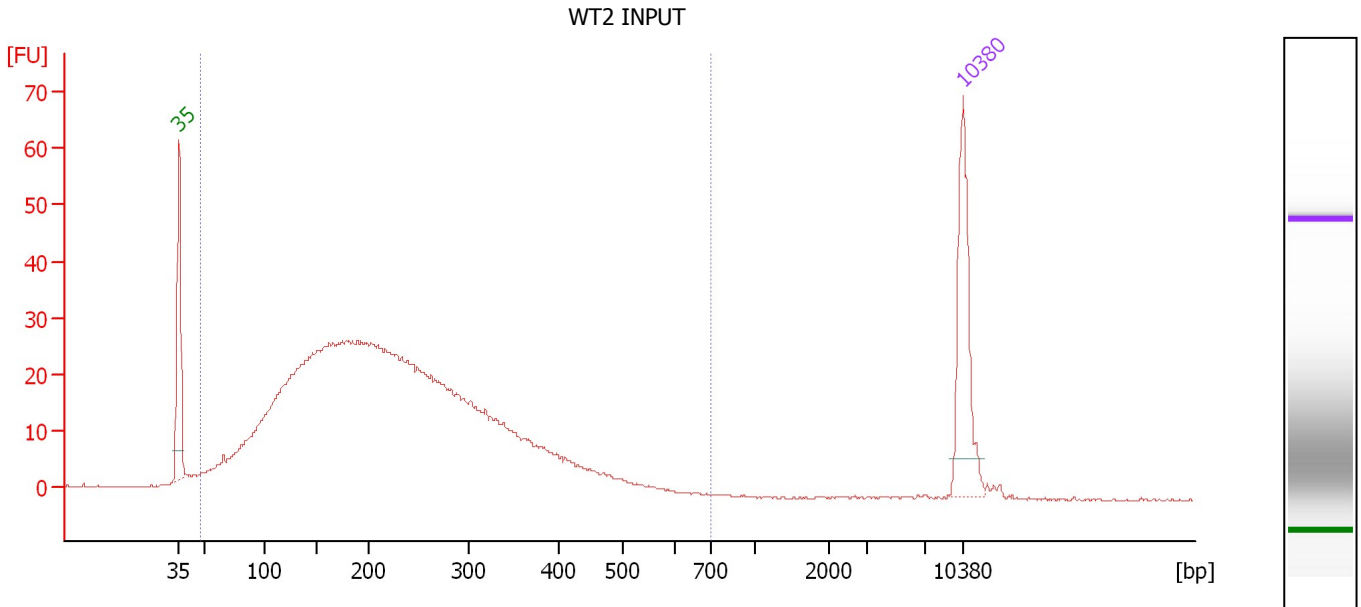
Region table for sample 5 : WT1 INPUT

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
58	1,000	242	14,532.0	1,711.83	1,200.5	98	45.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : WT2 INPUT

Number of peaks found: 0 Corr. Area 1: 945.5
 Noise: 0.1

Peak table for sample 6 : WT2 INPUT

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

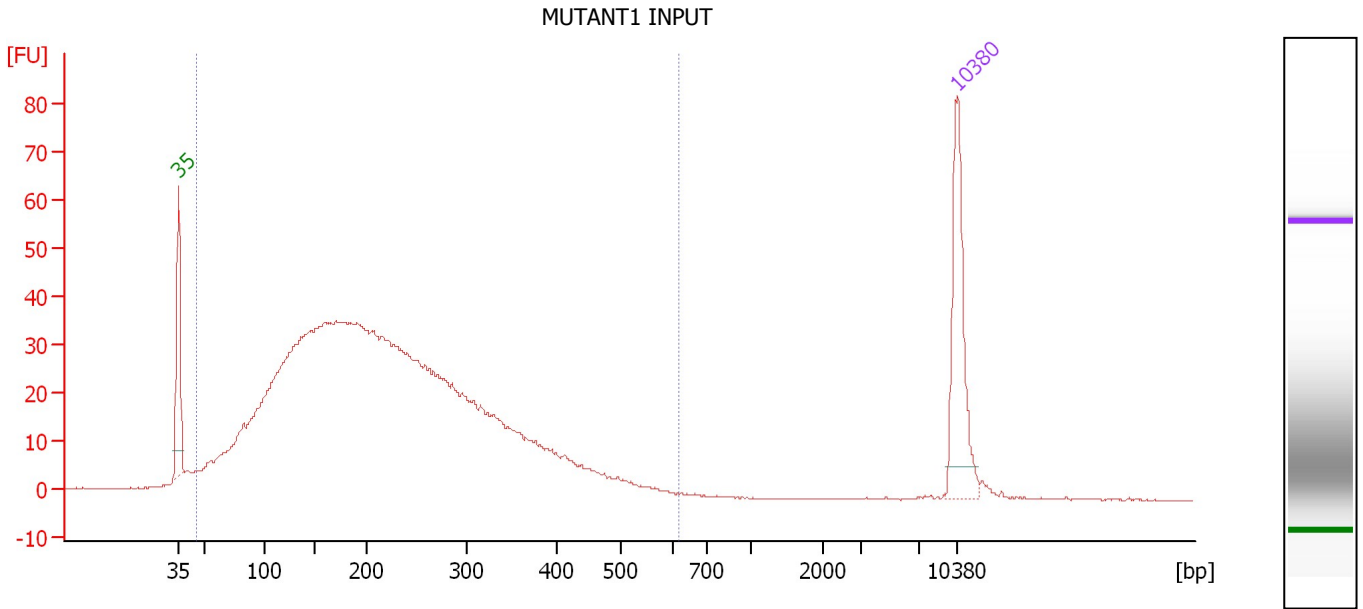
Region table for sample 6 : WT2 INPUT

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
48	701	227	15,726.3	1,762.72	945.5	99	42.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : MUTANT1 INPUT

Number of peaks found: 0 Corr. Area 1: 1,266.9
 Noise: 0.1

Peak table for sample 7 : MUTANT1 INPUT

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	10,380	75.00	10.9	Upper Marker

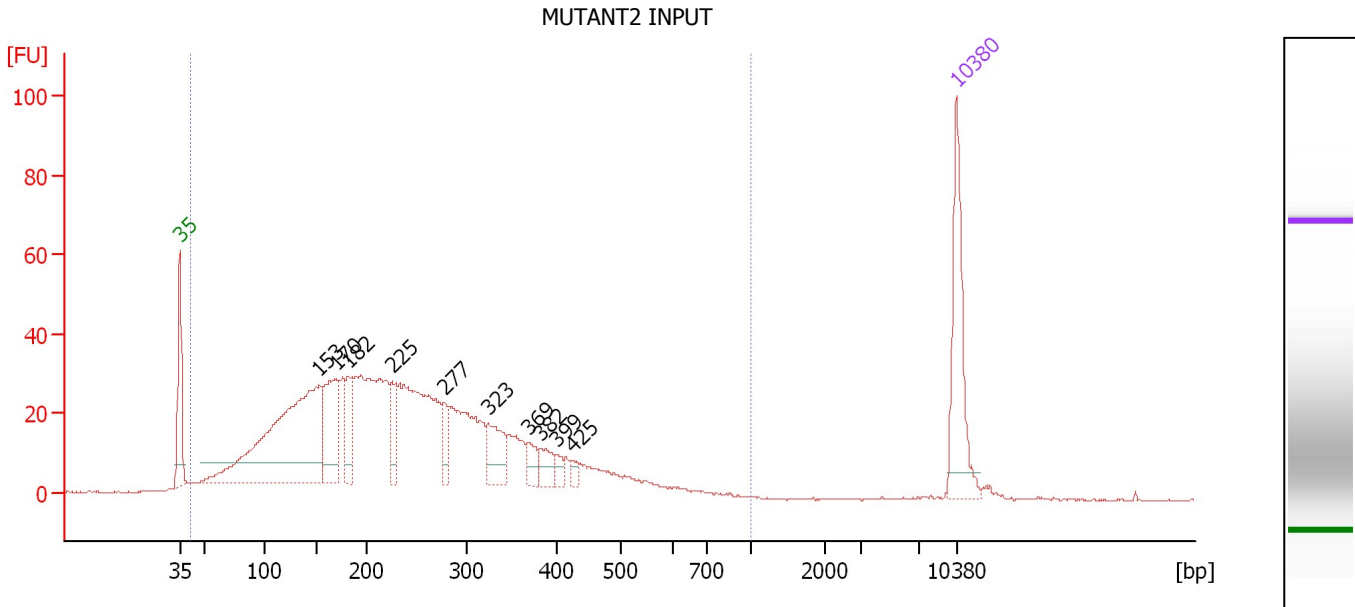
Region table for sample 7 : MUTANT1 INPUT

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
45	622	222	18,029.0	1,934.89	1,266.9	98	44.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : MUTANT2 INPUT

Number of peaks found: 10 Corr. Area 1: 1,155.3
 Noise: 0.1

Peak table for sample 8 : MUTANT2 INPUT

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	153	381.07	3,767.1	
3	170	101.85	907.6	
4	182	44.09	366.9	
5	225	36.98	248.6	
6	277	25.79	140.8	
7	323	47.50	222.9	
8	369	16.86	69.2	
9	382	19.68	78.0	
10	399	9.29	35.3	
11	425	7.12	25.4	
12	10,380	75.00	10.9	Upper Marker

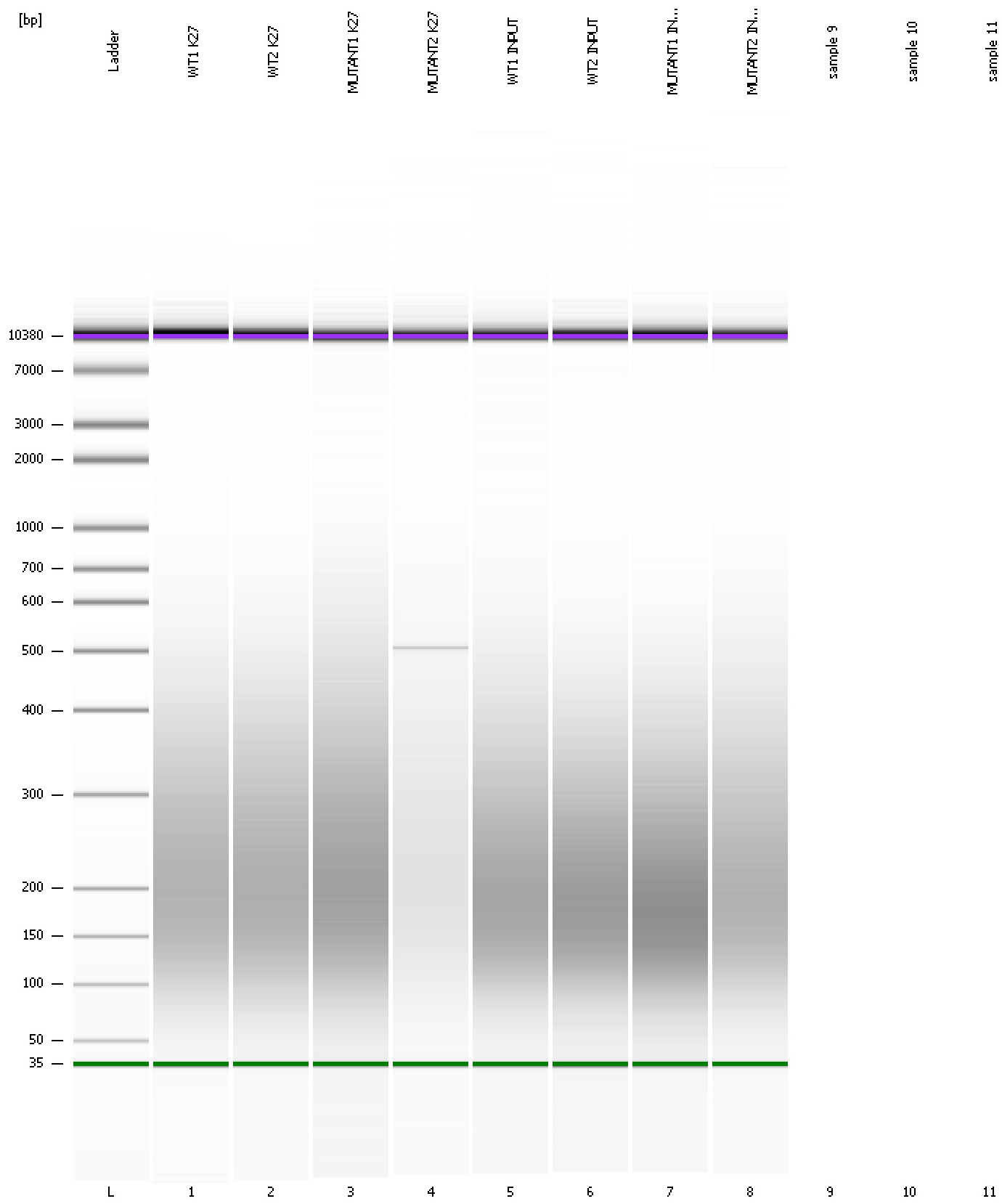
Region table for sample 8 : MUTANT2 INPUT

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
42	1,000	246	14,486.5	1,648.21	1,155.3	99	47.5	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
Modified: 5/21/2013 9:46:52 AM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
Modified: 5/21/2013 9:46:52 AM

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:\...ents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad

Created: 5/21/2013 9:11:37 AM
 Modified: 5/21/2013 9:46:52 AM

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		5/21/2013 9:44:22 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-21\2013-05-21_001.xad)		Instrument	Run		5/21/2013 9:11:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/21/2013 9:11:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/21/2013 9:11:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/21/2013 9:11:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/21/2013 9:11:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/21/2013 9:11:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/21/2013 9:11:42 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1