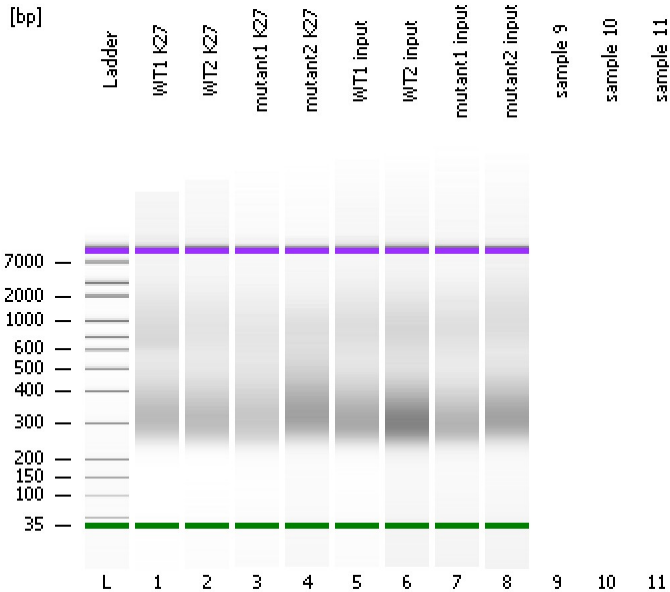


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
Modified: 5/22/2013 11:35:41 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

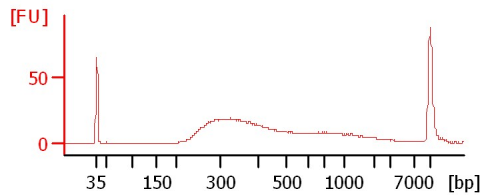
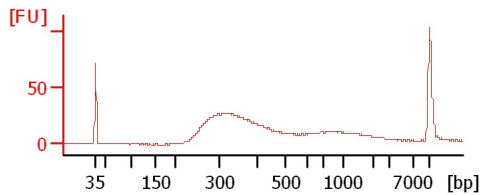
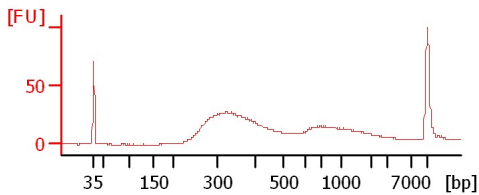
#### Chip Information:

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

WT1 K27

WT2 K27

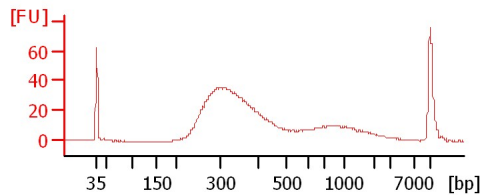
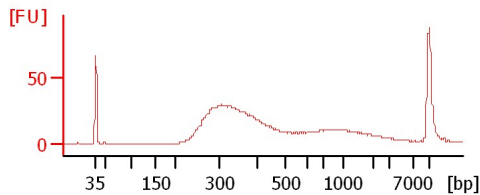
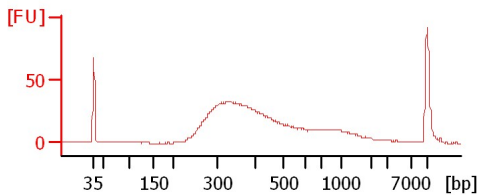
mutant1 K27



mutant2 K27

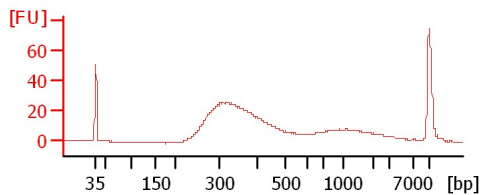
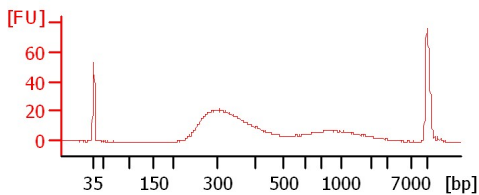
WT1 input

WT2 input



mutant1 input

mutant2 input



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 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\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
Modified: 5/22/2013 11:35:41 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

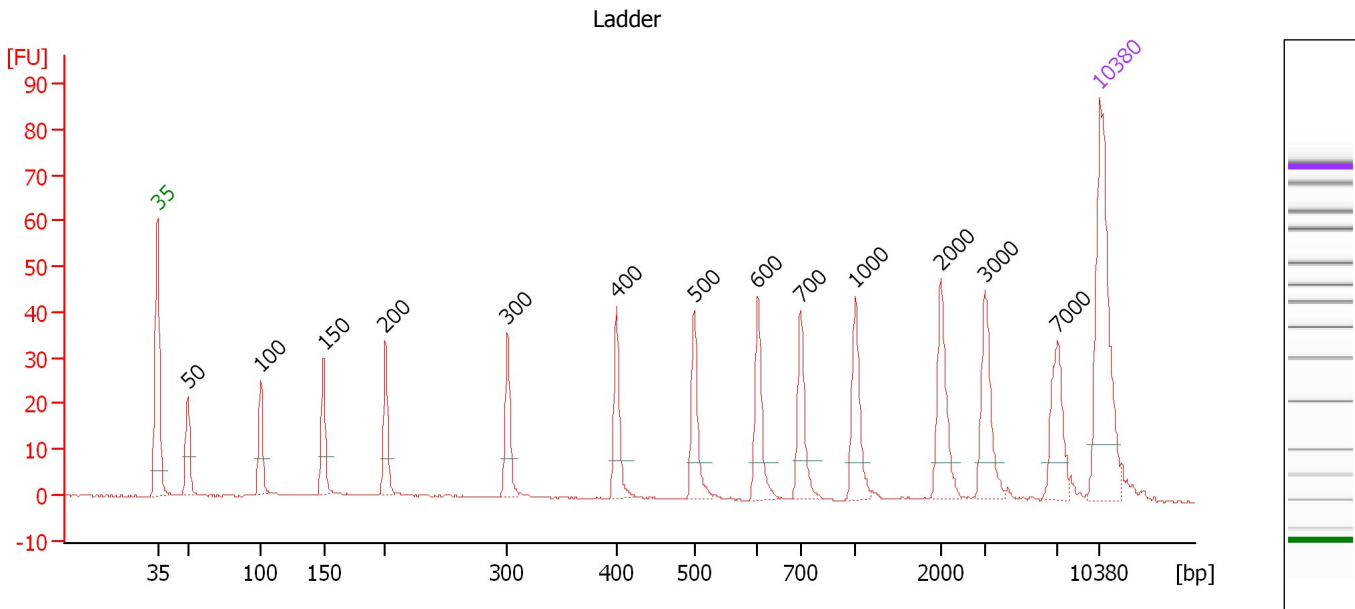
**Ladder**

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\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

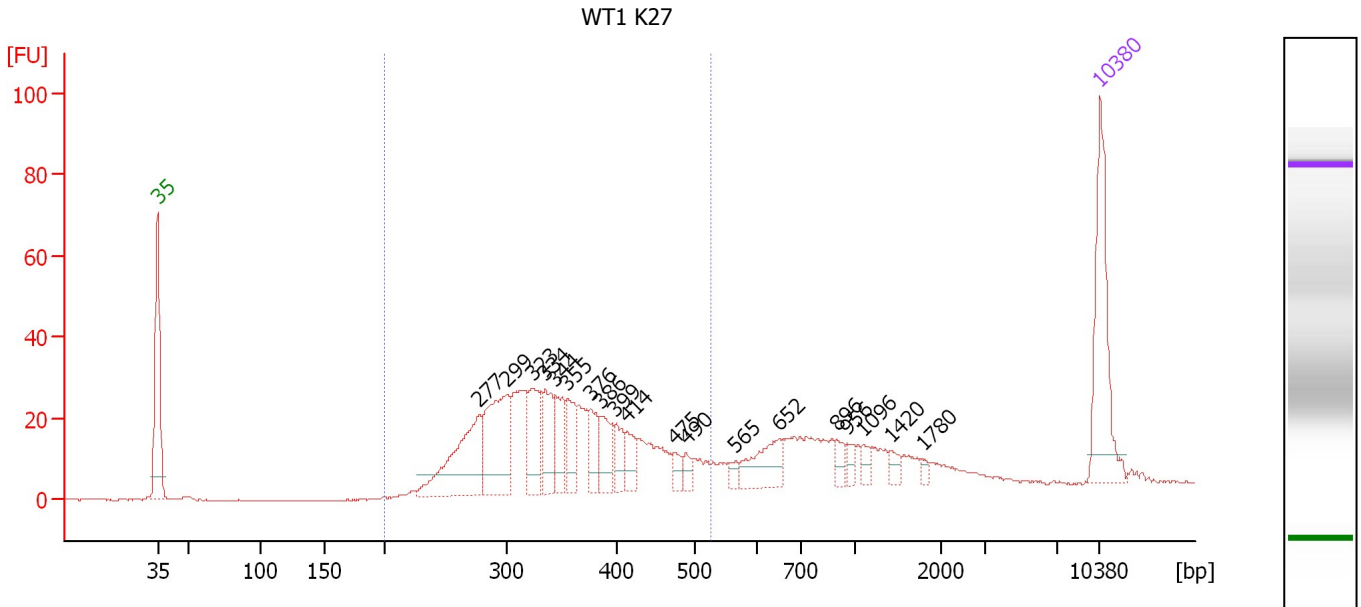
**Peak table for Ladder**

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\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : WT1 K27**

Number of peaks found: 19                      Corr. Area 1: 495.8  
 Noise: 0.1

**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	277	107.56	589.3	
3	299	98.24	497.1	
4	323	52.92	248.0	
5	334	43.27	196.0	
6	344	36.20	159.5	
7	355	29.96	127.9	
8	376	29.57	119.1	
9	386	31.70	124.5	
10	399	20.07	76.2	
11	414	19.76	72.4	
12	475	10.57	33.7	
13	490	8.78	27.1	
14	565	6.59	17.7	
15	652	39.45	91.7	
16	896	9.29	15.7	
17	956	7.42	11.8	
18	1,096	7.69	10.6	
19	1,420	6.88	7.3	
20	1,780	3.25	2.8	
21	10,380	75.00	10.9	Upper Marker

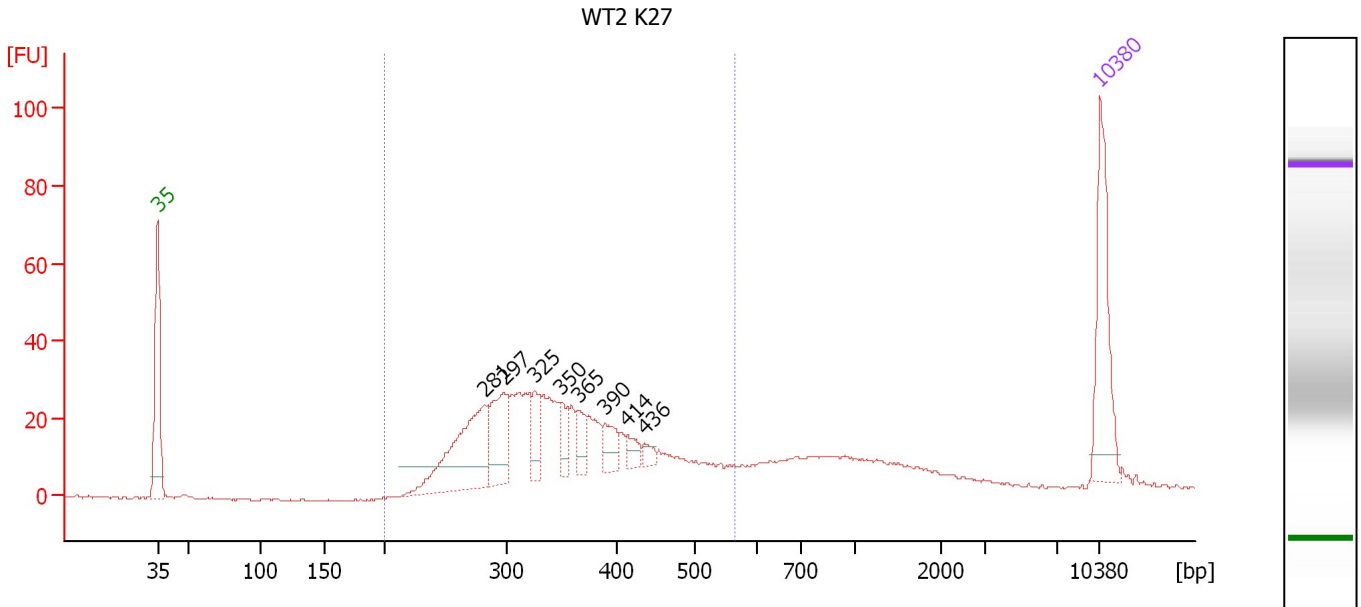
**Region table for sample 1 : WT1 K27**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	526	351	2,980.0	657.87	495.8	69	19.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : WT2 K27**

Number of peaks found: 8                      Corr. Area 1: 542.7  
 Noise: 0.3

**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	281	135.65	730.5	
3	297	67.35	343.4	
4	325	26.44	123.3	
5	350	20.66	89.5	
6	365	19.95	82.9	
7	390	24.64	95.8	
8	414	13.97	51.1	
9	436	8.43	29.3	
10	10,380	75.00	10.9	Upper Marker

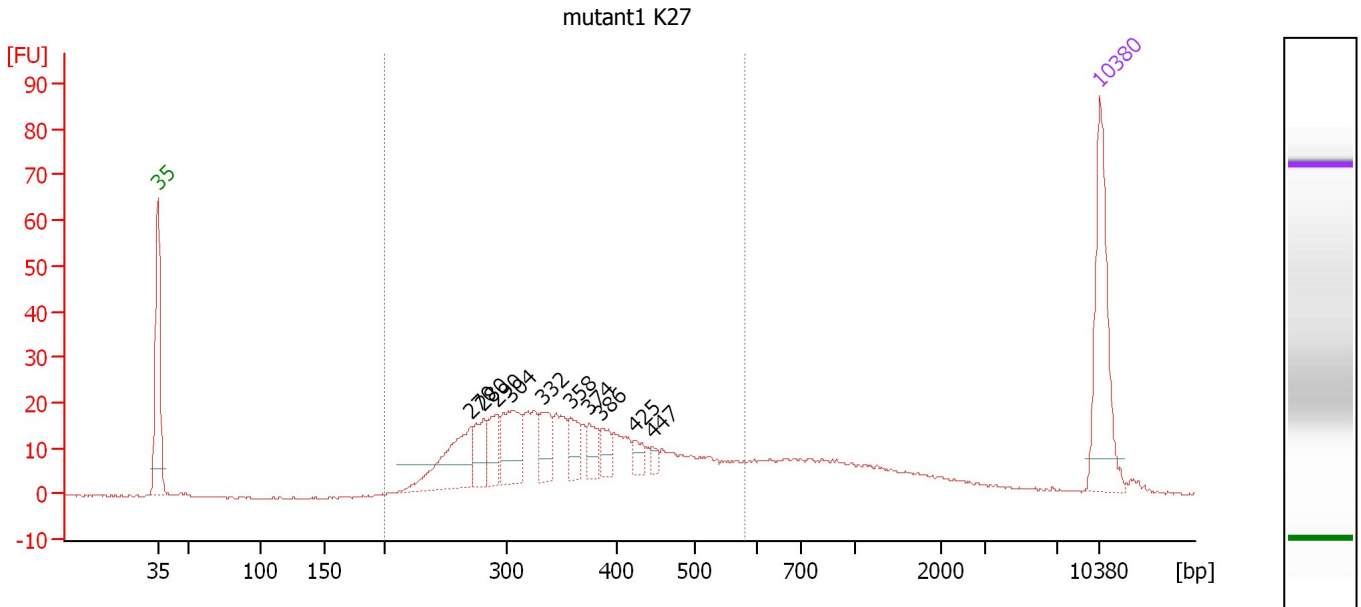
**Region table for sample 2 : WT2 K27**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	564	355	3,242.6	714.93	542.7	74	21.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : mutant1 K27**

Number of peaks found: 10                      Corr. Area 1: 436.6  
 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	270	77.45	433.9	
3	280	33.38	180.4	
4	290	30.50	159.2	
5	304	53.13	265.1	
6	332	30.07	137.3	
7	358	22.03	93.2	
8	374	17.71	71.7	
9	386	16.43	64.5	
10	425	10.61	37.8	
11	447	5.74	19.5	
12	10,380	75.00	10.9	Upper Marker

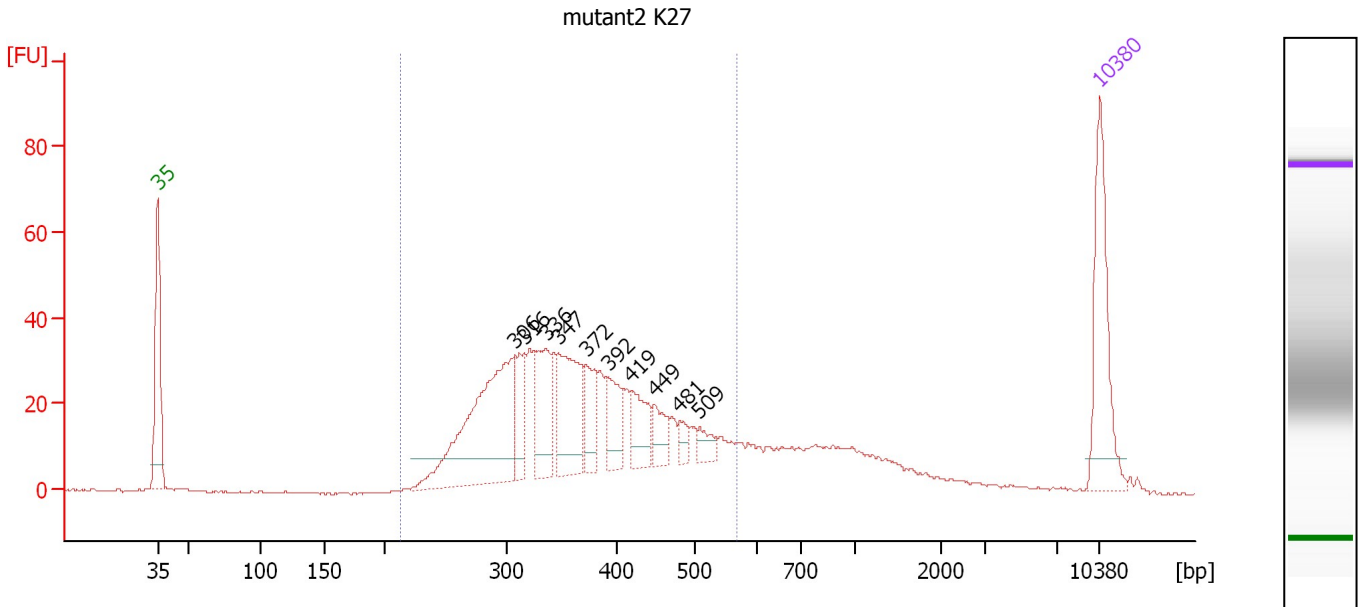
**Region table for sample 3 : mutant1 K27**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	578	364	2,724.7	605.83	436.6	75	23.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : mutant2 K27**

Number of peaks found: 10                      Corr. Area 1: 723.2  
 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	306	213.76	1,058.6	
3	316	40.61	195.0	
4	336	70.34	317.3	
5	347	93.05	406.7	
6	372	39.69	161.5	
7	392	38.04	147.0	
8	419	38.70	139.8	
9	449	21.46	72.3	
10	481	10.17	32.0	
11	509	14.36	42.7	
12	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : mutant2 K27**

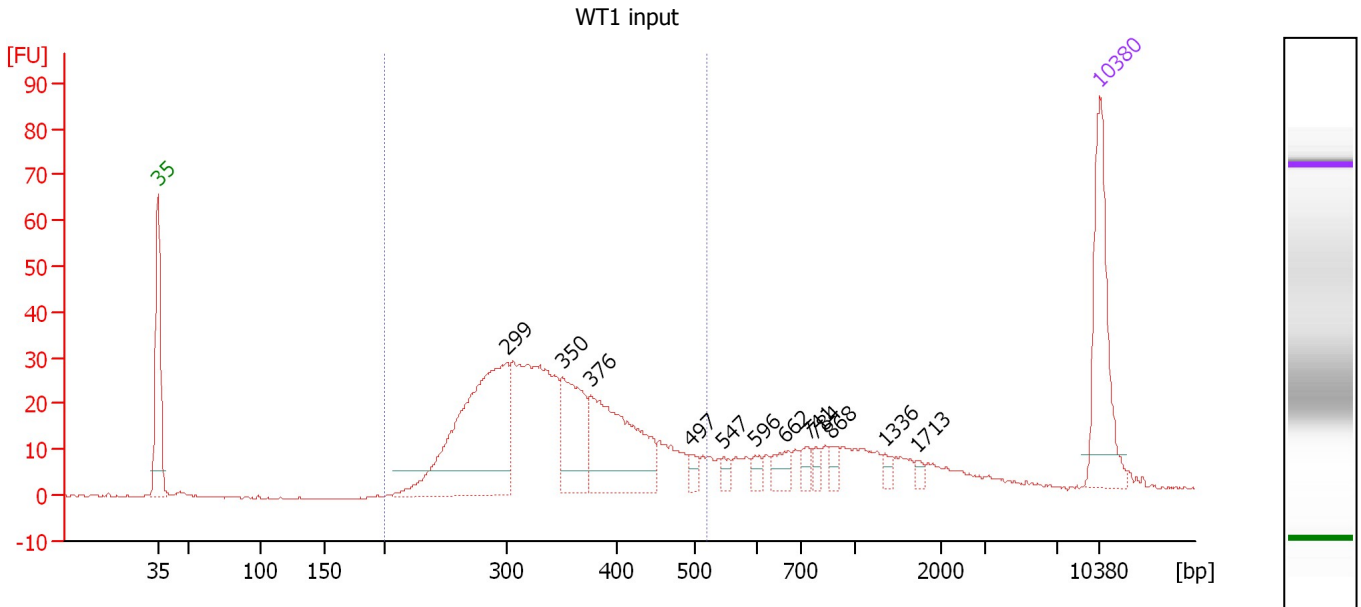
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
213	568	371	3,975.3	912.83	723.2	77	21.4	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : WT1 input**

Number of peaks found: 12                      Corr. Area 1: 574.1  
 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	299	247.08	1,251.3	
3	350	85.50	369.9	
4	376	135.65	546.1	
5	497	7.95	24.3	
6	547	8.13	22.5	
7	596	7.43	18.9	
8	662	14.72	33.7	
9	741	9.50	19.4	
10	784	7.16	13.8	
11	868	8.01	14.0	
12	1,336	5.08	5.8	
13	1,713	3.76	3.3	
14	10,380	75.00	10.9	Upper Marker

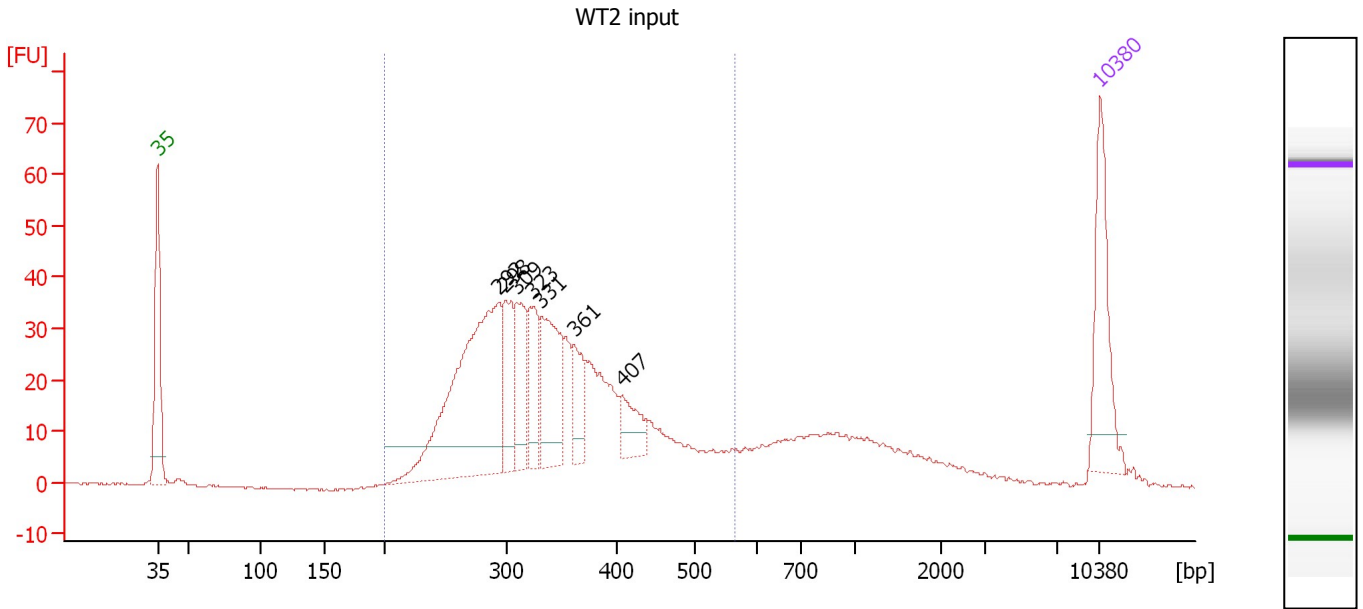
**Region table for sample 5 : WT1 input**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	519	345	3,435.9	742.77	574.1	70	19.5	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : WT2 input**

Number of peaks found: 7      Corr. Area 1: 698.8  
 Noise: 0.3

**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	292	332.75	1,724.5	
3	298	72.19	366.6	
4	309	68.88	337.5	
5	323	60.53	283.6	
6	331	109.15	500.0	
7	361	45.77	192.1	
8	407	34.74	129.2	
9	10,380	75.00	10.9	Upper Marker

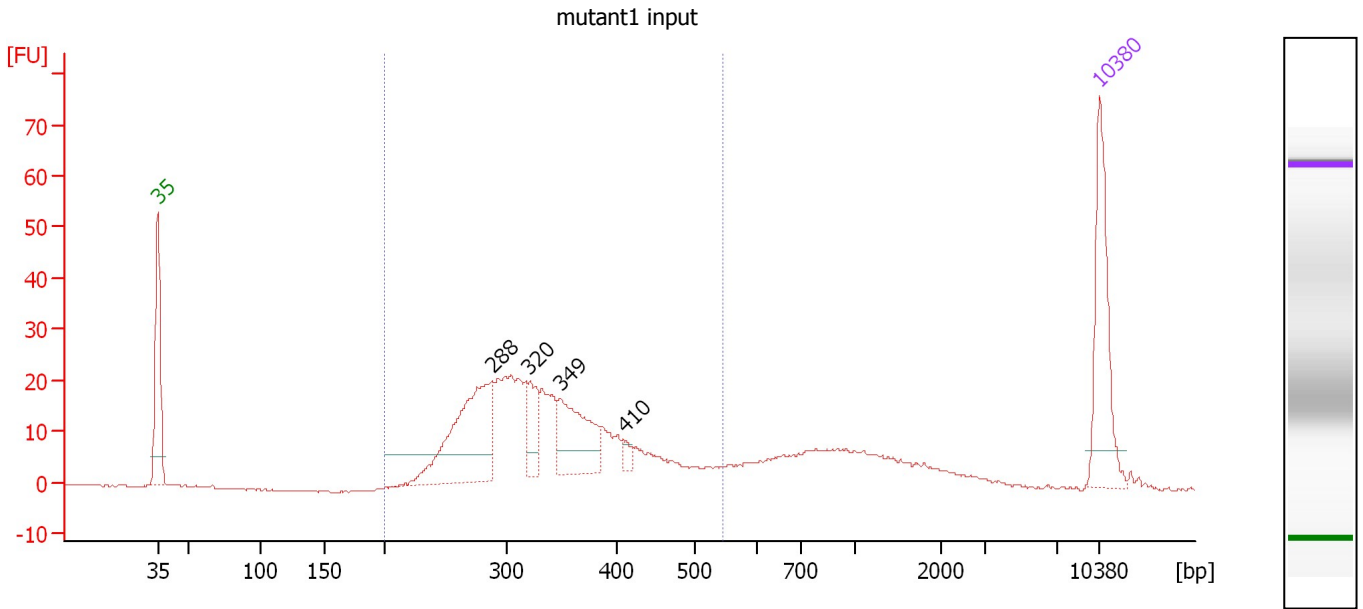
**Region table for sample 6 : WT2 input**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	565	344	5,238.1	1,120.33	698.8	76	21.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : mutant1 input**

Number of peaks found: 4                      Corr. Area 1: 392.8  
 Noise: 0.2

**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	288	159.84	842.2	
3	320	37.21	176.1	
4	349	81.71	355.1	
5	410	6.69	24.7	
6	10,380	75.00	10.9	Upper Marker

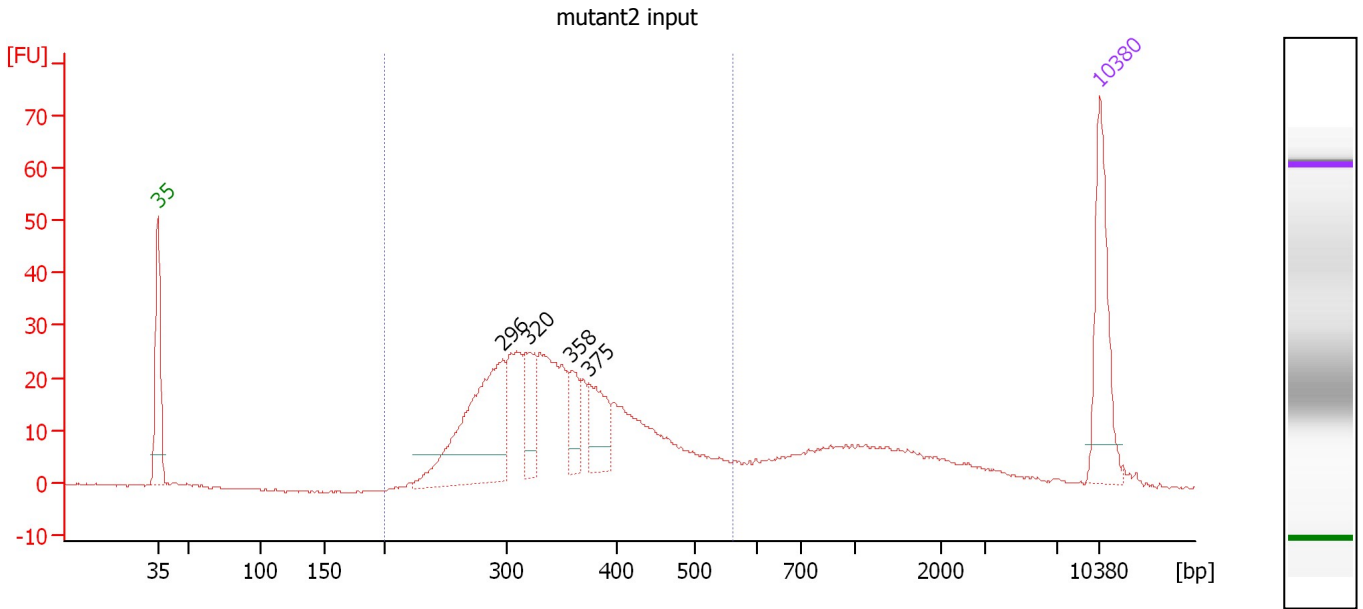
**Region table for sample 7 : mutant1 input**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	544	340	2,945.5	626.89	392.8	71	20.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : mutant2 input**

Number of peaks found: 4                      Corr. Area 1: 489.3  
 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	296	198.15	1,014.9	
3	320	50.32	238.1	
4	358	34.79	147.1	
5	375	51.59	208.4	
6	10,380	75.00	10.9	Upper Marker

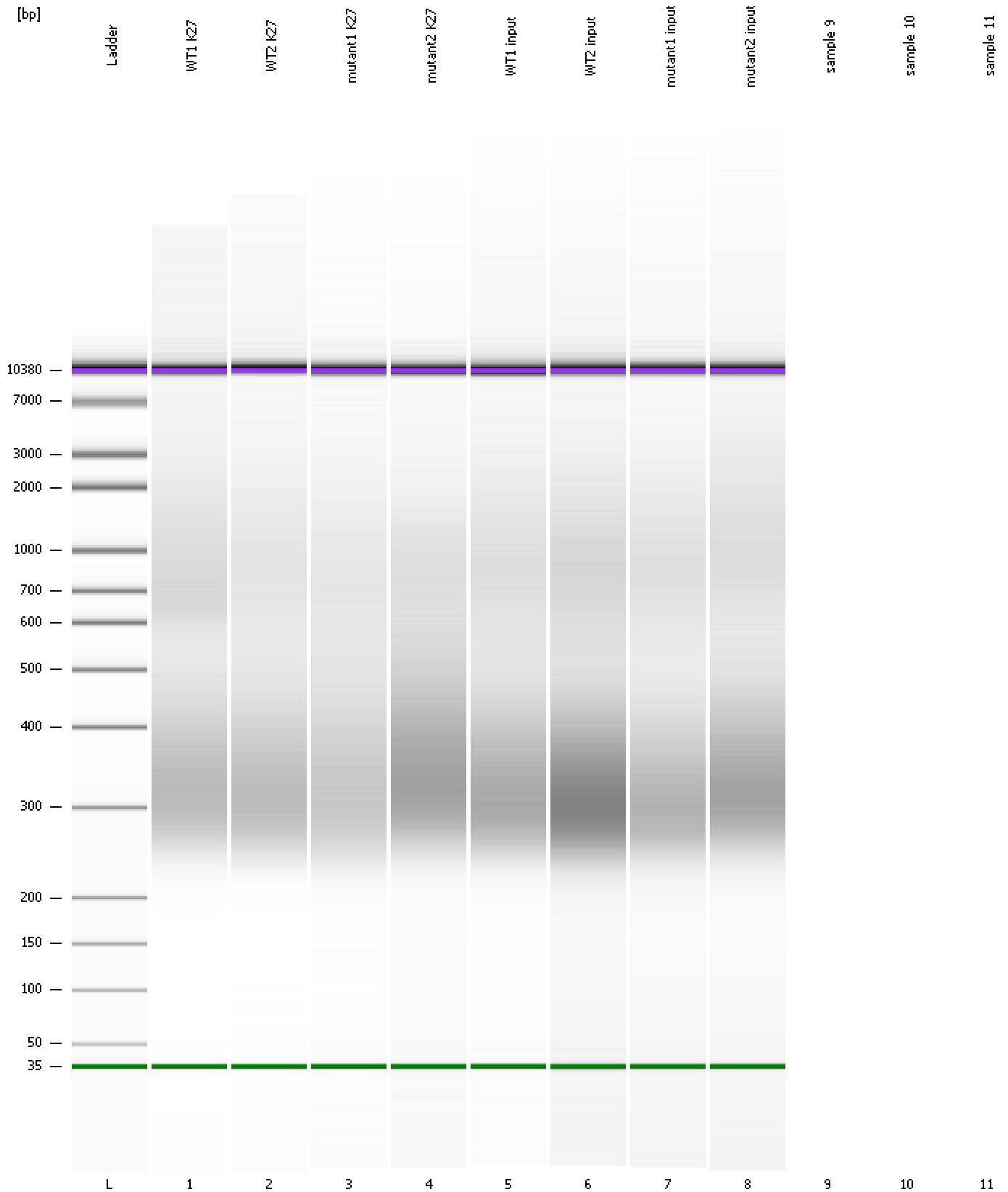
**Region table for sample 8 : mutant2 input**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	560	355	3,547.6	788.08	489.3	72	20.4	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
Modified: 5/22/2013 11:35:41 AM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
Modified: 5/22/2013 11:35:41 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\2013-05-22\2013-05-22\_001.xad

Created: 5/22/2013 11:02:04 AM  
 Modified: 5/22/2013 11:35:41 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		5/22/2013 11:34:47 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-22\2013-05-22_001.xad)		Instrument	Run		5/22/2013 11:02:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/22/2013 11:02:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/22/2013 11:02:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/22/2013 11:02:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/22/2013 11:02:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/22/2013 11:02:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/22/2013 11:02:10 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1