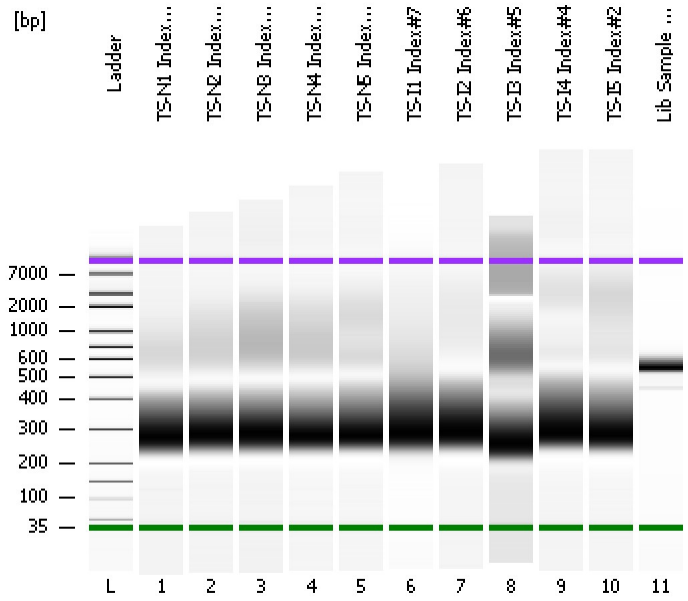
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

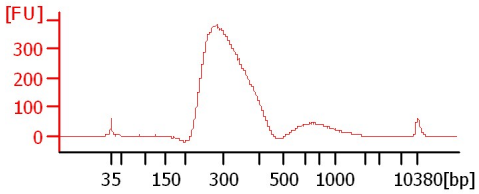
Assay Information:

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

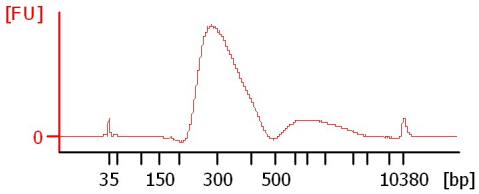
Chip Information:

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

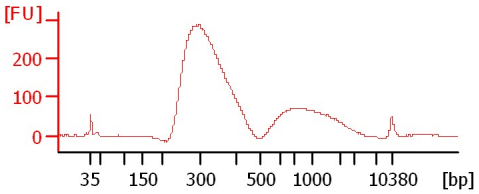
TS-N1 Index#7



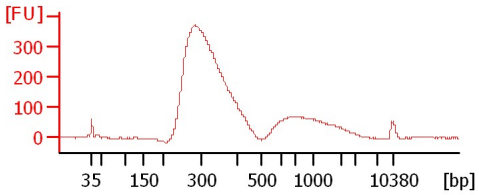
TS-N2 Index#6



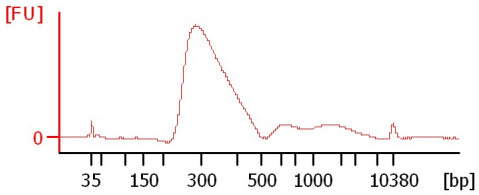
TS-N3 Index#5



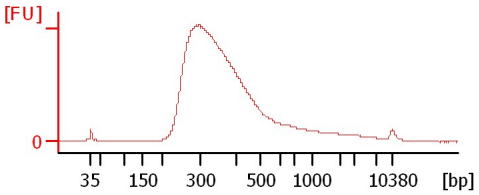
TS-N4 Index#4



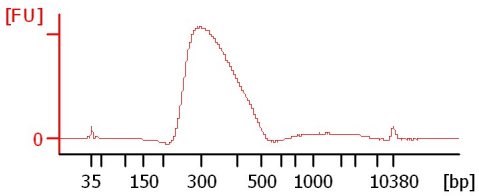
TS-N5 Index#2



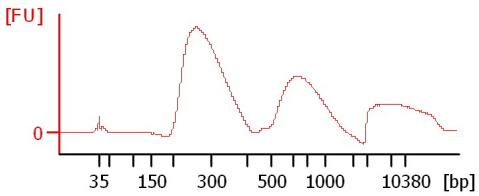
TS-I1 Index#7



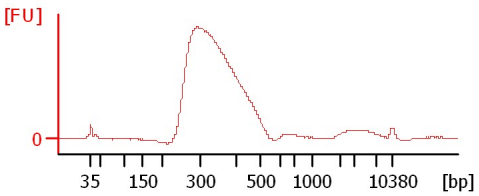
TS-I2 Index#6



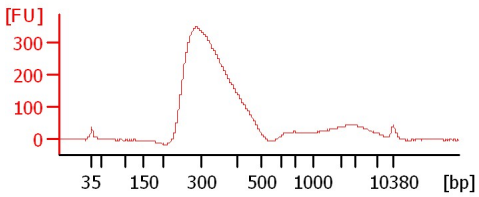
TS-I3 Index#5



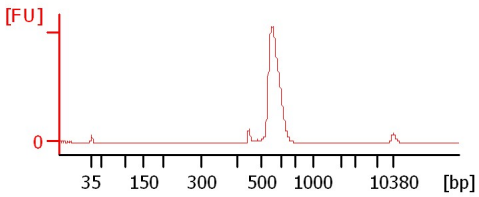
TS-I4 Index#4



TS-I5 Index#2



Lib Sample #1 GOTTSTEiN



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TS-N1 Index#7		☐	✔			
TS-N2 Index#6		☐	✔			
TS-N3 Index#5		☐	✔			
TS-N4 Index#4		☐	✔			
TS-N5 Index#2		☐	✔			
TS-I1 Index#7		☐	✔			
TS-I2 Index#6		☐	✔			
TS-I3 Index#5		☐	✔			
TS-I4 Index#4		☐	✔			
TS-I5 Index#2		☐	✔			
Lib Sample #1 GOTTSTEiN		☐	✔			
Ladder		☐	✔			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 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

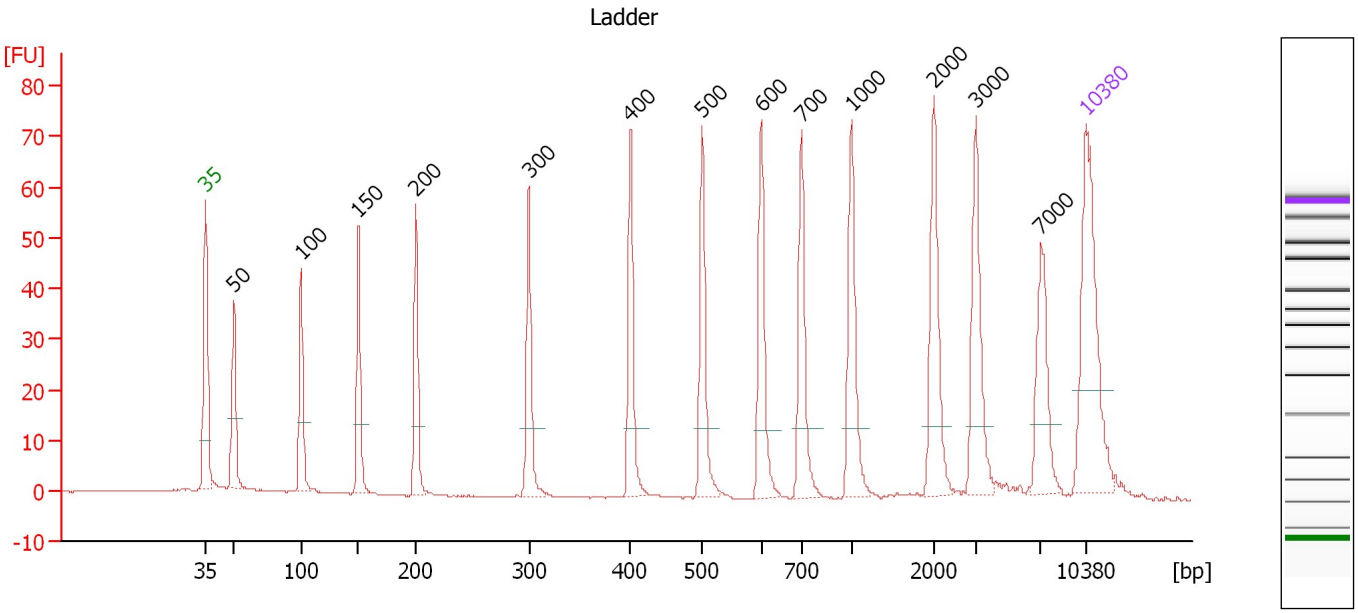
Ladder

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\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

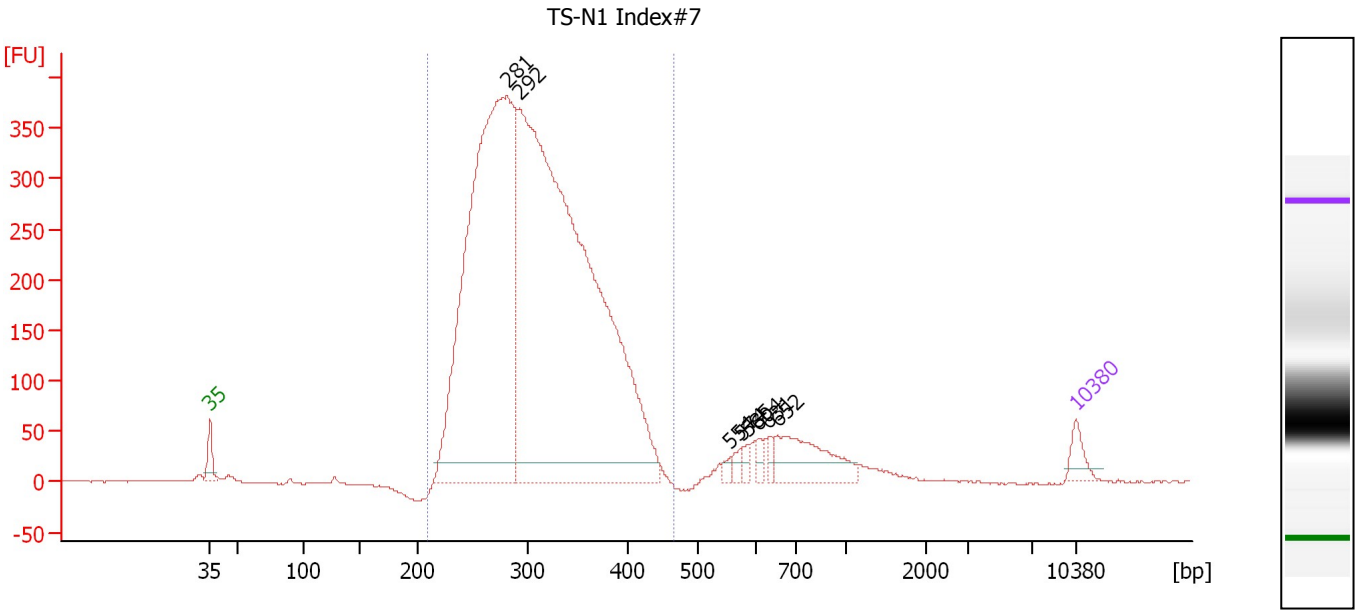
Peak table for Ladder

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\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 1 : TS-N1 Index#7

Height Threshold [FU] : 20

Overall Results for sample 1 : TS-N1 Index#7

Number of peaks found:	8	Corr. Area 1:	6,319.2
Noise:	0.2		

Peak table for sample 1 : TS-N1 Index#7

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	281	4,926.50	26,539.6	
3	292	7,095.01	36,779.3	
4	554	30.94	84.7	
5	574	45.39	119.8	
6	585	36.40	94.2	
7	604	51.16	128.3	
8	631	47.28	113.6	
9	652	396.85	921.9	
10	10,380	75.00	10.9	Upper Marker

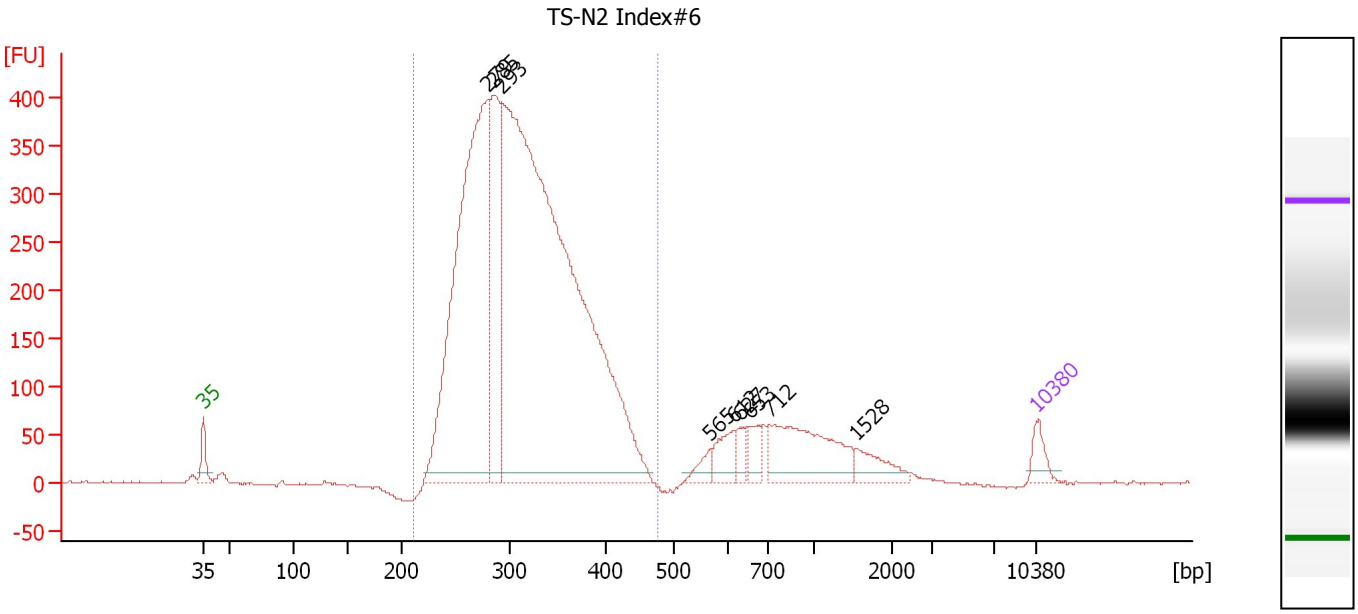
Region table for sample 1 : TS-N1 Index#7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
209	465	309	57,855.2	11,451.24	6,319.2	92	15.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 2 : TS-N2 Index#6

Height Threshold [FU] : 10

Overall Results for sample 2 : TS-N2 Index#6

Number of peaks found:	9	Corr. Area 1:	6,355.9
Noise:	1.2		

Peak table for sample 2 : TS-N2 Index#6

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	279	3,369.87	18,286.0	
3	285	1,004.74	5,347.1	
4	293	6,965.74	35,999.6	
5	565	75.59	202.7	
6	612	157.88	391.0	
7	627	78.64	190.0	
8	653	103.01	238.8	
9	712	587.89	1,251.2	
10	1,528	136.26	135.1	
11	10,380	75.00	10.9	Upper Marker

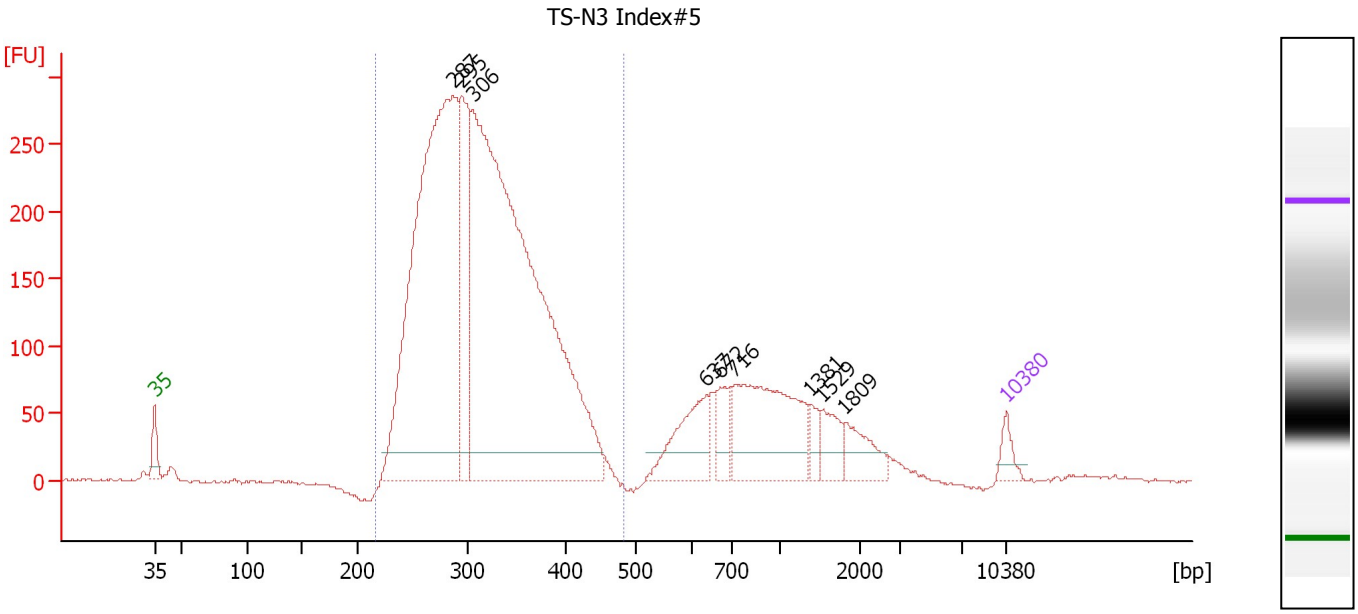
Region table for sample 2 : TS-N2 Index#6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
210	477	315	52,982.1	10,696.84	6,355.9	88	15.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 3 : TS-N3 Index#5

Height Threshold [FU] : 20

Overall Results for sample 3 : TS-N3 Index#5

Number of peaks found:	9	Corr. Area 1:	4,563.0
Noise:	1.1		

Peak table for sample 3 : TS-N3 Index#5

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	4,592.00	24,220.4	
3	295	1,002.54	5,140.9	
4	306	6,219.01	30,810.0	
5	637	457.00	1,087.8	
6	672	184.73	416.3	
7	716	988.82	2,091.9	
8	1,381	95.37	104.6	
9	1,529	168.03	166.5	
10	1,809	197.29	165.2	
11	10,380	75.00	10.9	Upper Marker

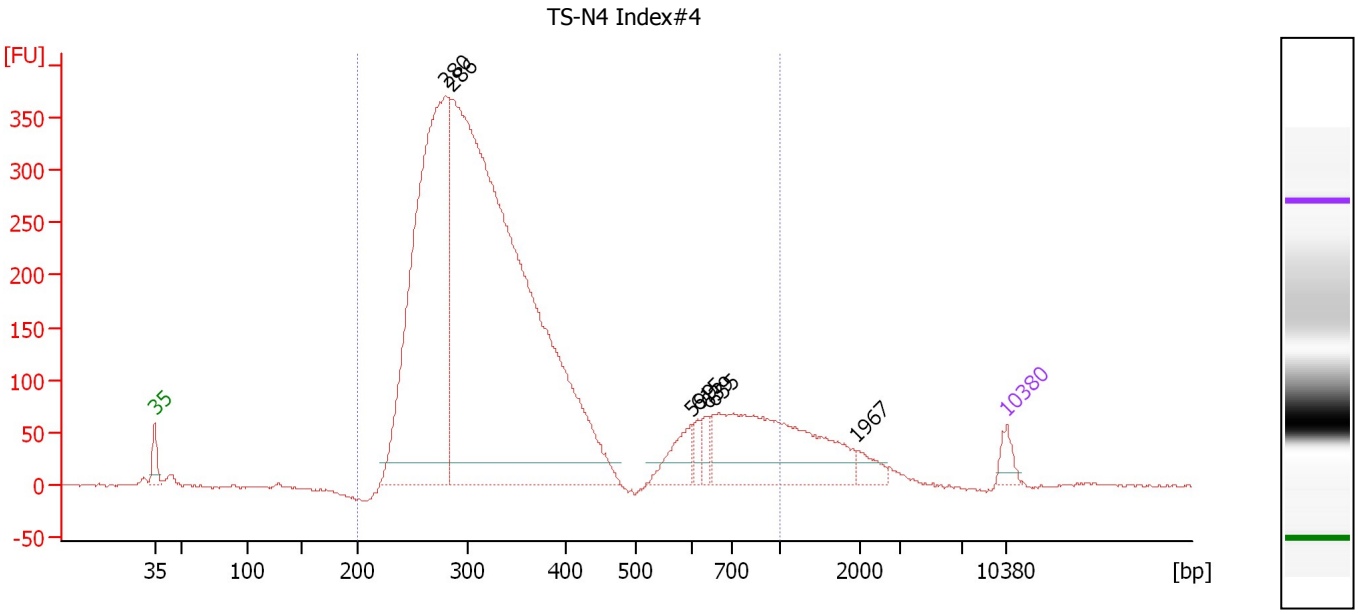
Region table for sample 3 : TS-N3 Index#5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
217	484	316	56,926.0	11,498.96	4,563.0	79	15.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 4 : TS-N4 Index#4

Height Threshold [FU] : 20

Overall Results for sample 4 : TS-N4 Index#4

Number of peaks found:	7	Corr. Area 1:	6,199.2
Noise:	1.3		

Peak table for sample 4 : TS-N4 Index#4

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	280	4,149.73	22,460.7	
3	286	8,160.16	43,265.6	
4	599	228.73	578.2	
5	615	79.34	195.3	
6	639	91.04	215.9	
7	655	1,294.46	2,992.9	
8	1,967	91.52	70.5	
9	10,380	75.00	10.9	Upper Marker

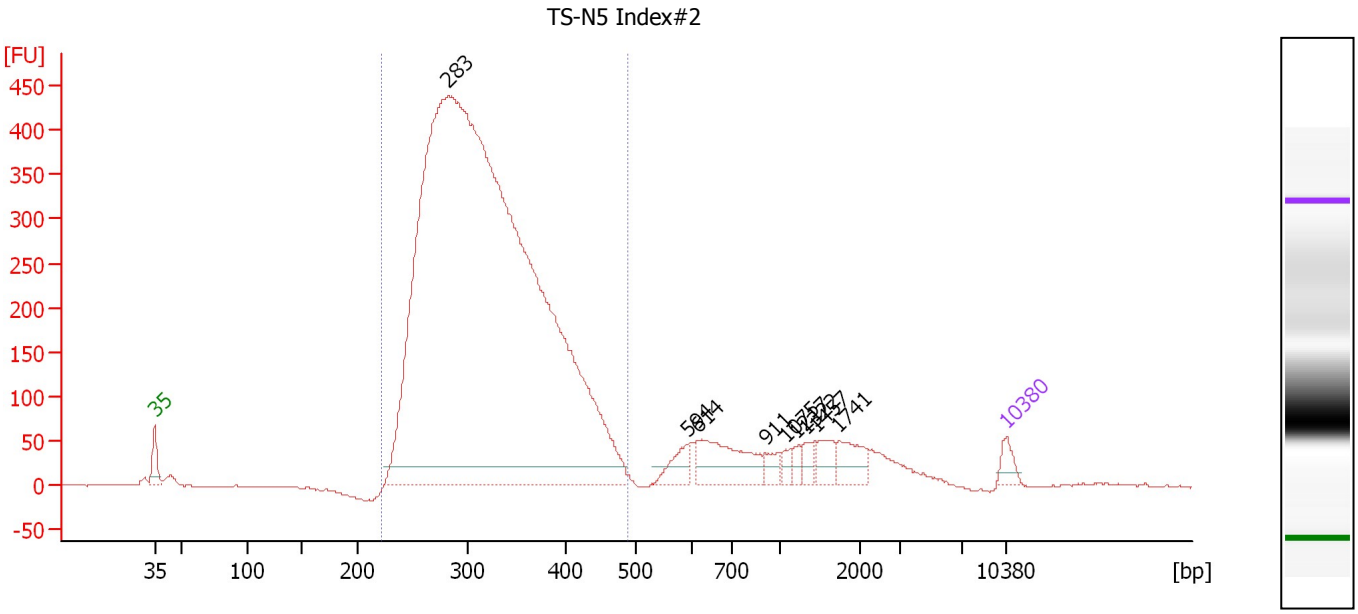
Region table for sample 4 : TS-N4 Index#4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	368	59,958.1	12,662.66	6,199.2	94	41.6	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 5 : TS-N5 Index#2

Height Threshold [FU] : 20

Overall Results for sample 5 : TS-N5 Index#2

Number of peaks found:	9	Corr. Area 1:	6,838.7
Noise:	0.8		

Peak table for sample 5 : TS-N5 Index#2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	283	16,030.18	85,974.2	
3	594	157.01	400.4	
4	614	476.27	1,174.6	
5	911	83.92	139.6	
6	1,075	52.21	73.6	
7	1,217	52.36	65.2	
8	1,322	82.24	94.3	
9	1,457	133.14	138.5	
10	1,741	179.86	156.5	
11	10,380	75.00	10.9	Upper Marker

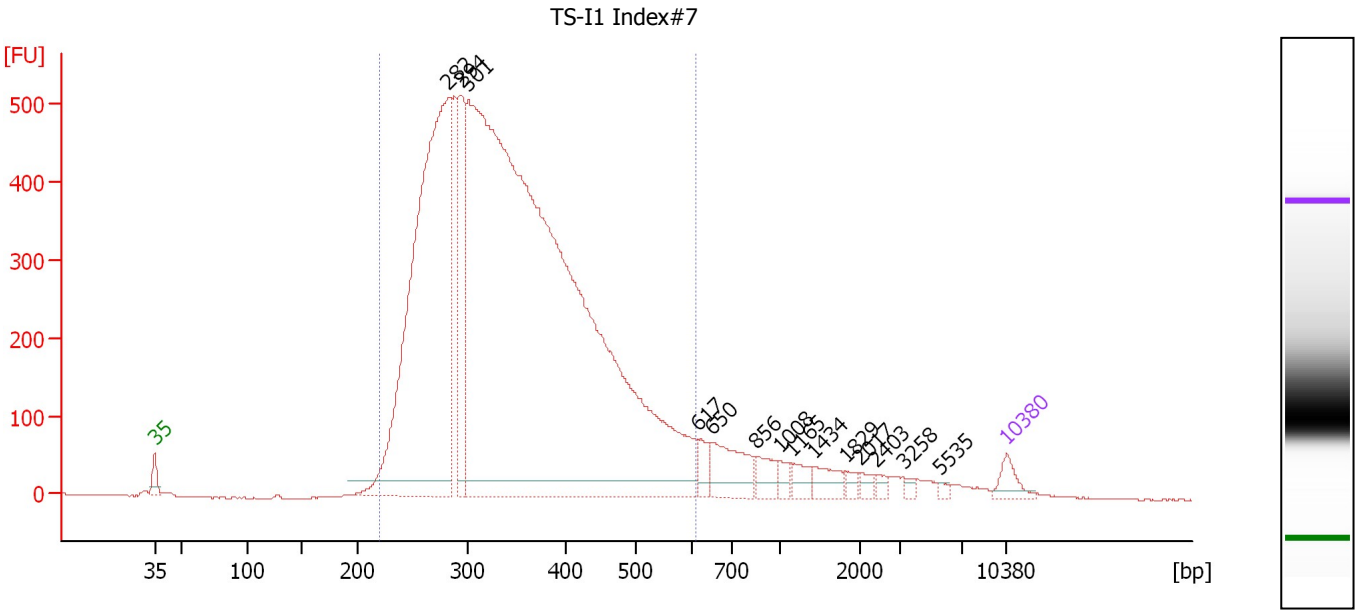
Region table for sample 5 : TS-N5 Index#2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	490	322	72,157.6	14,798.18	6,838.7	88	16.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 6 : TS-I1 Index#7

Height Threshold [FU] : 20

Overall Results for sample 6 : TS-I1 Index#7

Number of peaks found:	14	Corr. Area 1:	10,603.8
Noise:	0.5		

Peak table for sample 6 : TS-I1 Index#7

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	282	3,856.39	20,738.1	
3	294	731.21	3,764.4	
4	301	10,460.62	52,661.7	
5	617	88.10	216.5	
6	650	299.37	697.8	
7	856	109.00	192.9	
8	1,008	54.42	81.8	
9	1,165	72.60	94.5	
10	1,434	97.94	103.5	
11	1,829	34.25	28.4	
12	2,017	35.47	26.6	
13	2,403	26.45	16.7	
14	3,258	23.72	11.0	
15	5,535	15.23	4.2	
16	10,380	75.00	10.9	Upper Marker

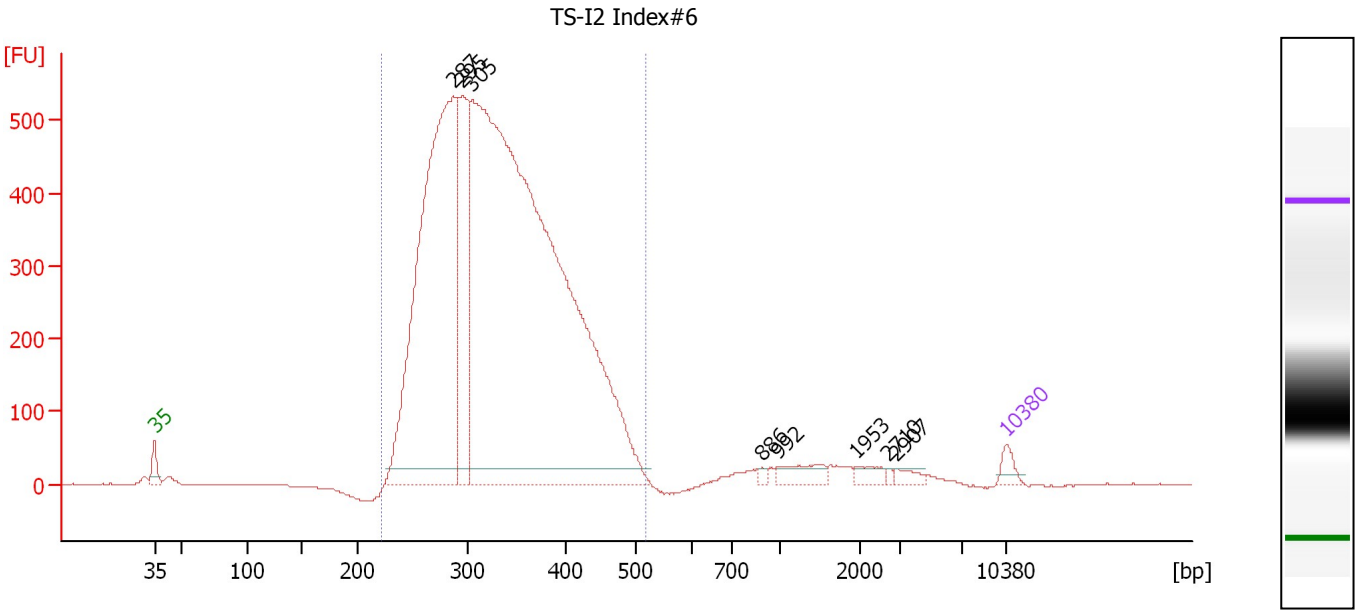
Region table for sample 6 : TS-I1 Index#7

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
220	609	350	65,855.9	14,192.48	10,603.8	91	23.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 7 : TS-I2 Index#6

Height Threshold [FU] : 20

Overall Results for sample 7 : TS-I2 Index#6

Number of peaks found:	8	Corr. Area 1:	9,502.4
Noise:	0.5		

Peak table for sample 7 : TS-I2 Index#6

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	287	6,192.41	32,675.4	
3	295	1,530.79	7,863.5	
4	305	13,518.79	67,165.9	
5	886	33.21	56.8	
6	992	180.04	275.1	
7	1,953	86.14	66.8	
8	2,710	20.38	11.4	
9	2,907	61.18	31.9	
10	10,380	75.00	10.9	Upper Marker

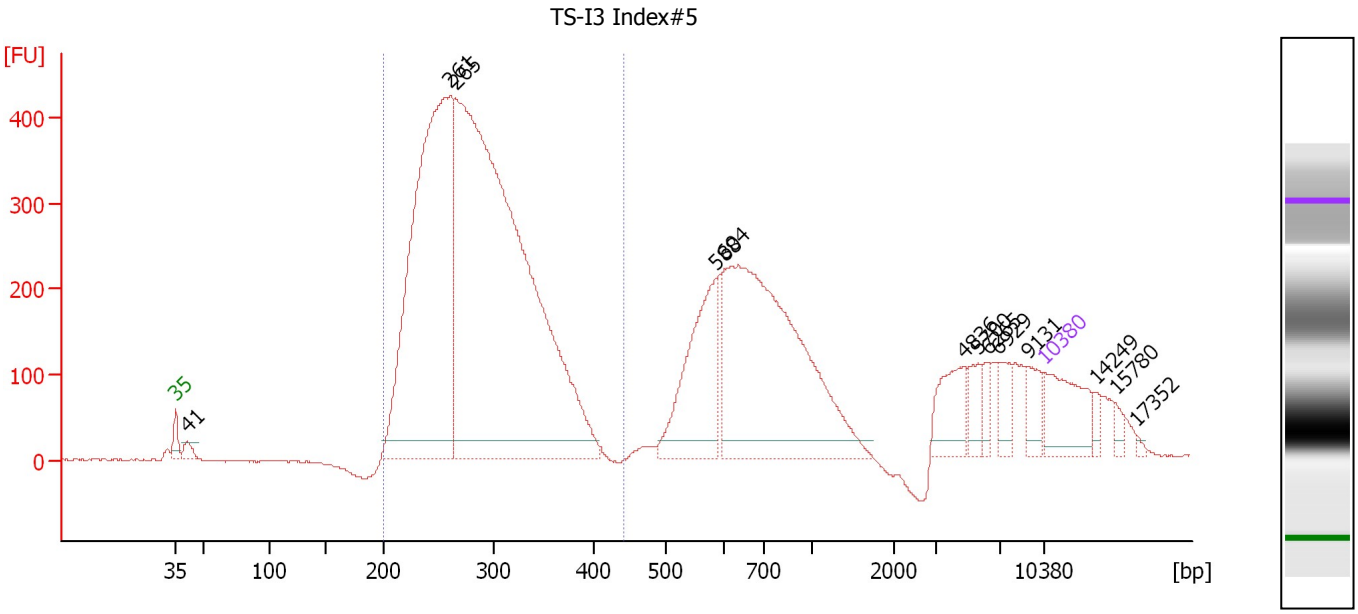
Region table for sample 7 : TS-I2 Index#6

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
221	519	334	94,095.5	19,929.90	9,502.4	96	17.8	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 8 : TS-I3 Index#5

Height Threshold [FU] : 20

Overall Results for sample 8 : TS-I3 Index#5

Number of peaks found:	13	Corr. Area 1:	7,043.4
Noise:	0.9		

Peak table for sample 8 : TS-I3 Index#5

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	22.43	826.2	
3	261	1,020.26	5,926.5	
4	265	1,720.98	9,852.4	
5	588	207.69	535.3	
6	604	590.77	1,482.4	
7	4,836	64.79	20.3	
8	5,700	29.03	7.7	
9	6,265	20.51	5.0	
10	6,929	31.80	7.0	
11	9,131	32.87	5.5	
12	10,380	75.00	10.9	Upper Marker
13	14,249	0.00	0.0	
14	15,780	0.00	0.0	
15	17,352	0.00	0.0	

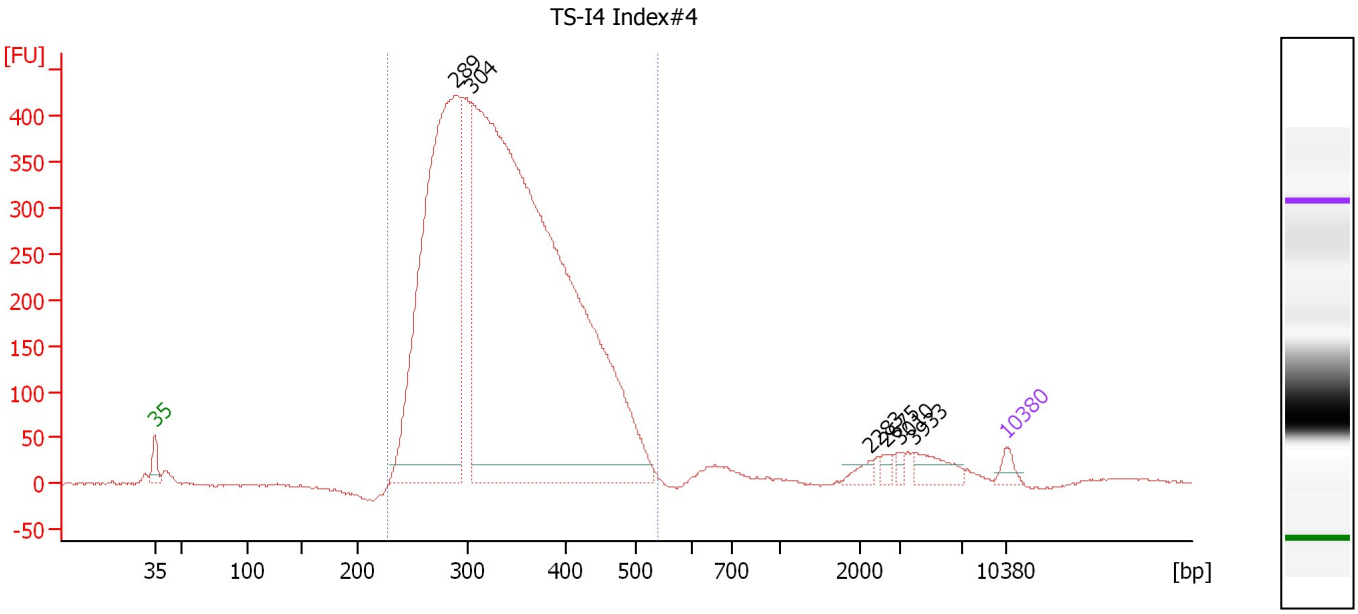
Region table for sample 8 : TS-I3 Index#5

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	442	284	14,263.1	2,610.47	7,043.4	64	15.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 9 : TS-I4 Index#4

Height Threshold [FU] : 20

Overall Results for sample 9 : TS-I4 Index#4

Number of peaks found:	6	Corr. Area 1:	7,394.1
Noise:	1.4		

Peak table for sample 9 : TS-I4 Index#4

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	289	6,275.33	32,863.8	
3	304	14,122.26	70,346.1	
4	2,283	73.87	49.0	
5	2,675	51.56	29.2	
6	3,010	43.15	21.7	
7	3,933	193.71	74.6	
8	10,380	75.00	10.9	Upper Marker

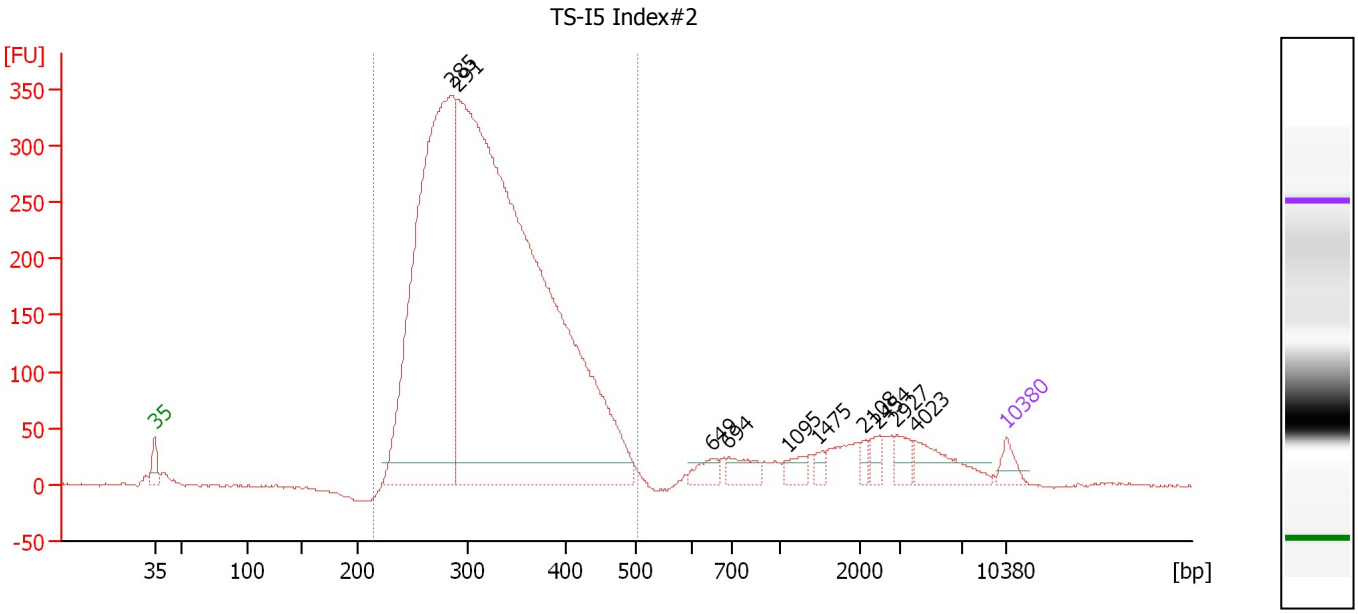
Region table for sample 9 : TS-I4 Index#4

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
227	539	340	93,495.8	20,084.04	7,394.1	95	18.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : TS-I5 Index#2

Height Threshold [FU] : 20

Overall Results for sample 10 : TS-I5 Index#2

Number of peaks found:	10	Corr. Area 1:	5,539.9
Noise:	1.2		

Peak table for sample 10 : TS-I5 Index#2

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	285	4,824.43	25,652.4	
3	291	10,020.12	52,216.3	
4	649	109.59	255.9	
5	694	141.87	309.7	
6	1,095	87.45	121.1	
7	1,475	50.69	52.1	
8	2,108	46.18	33.2	
9	2,454	70.27	43.4	
10	2,927	95.94	49.7	
11	4,023	230.62	86.9	
12	10,380	75.00	10.9	Upper Marker

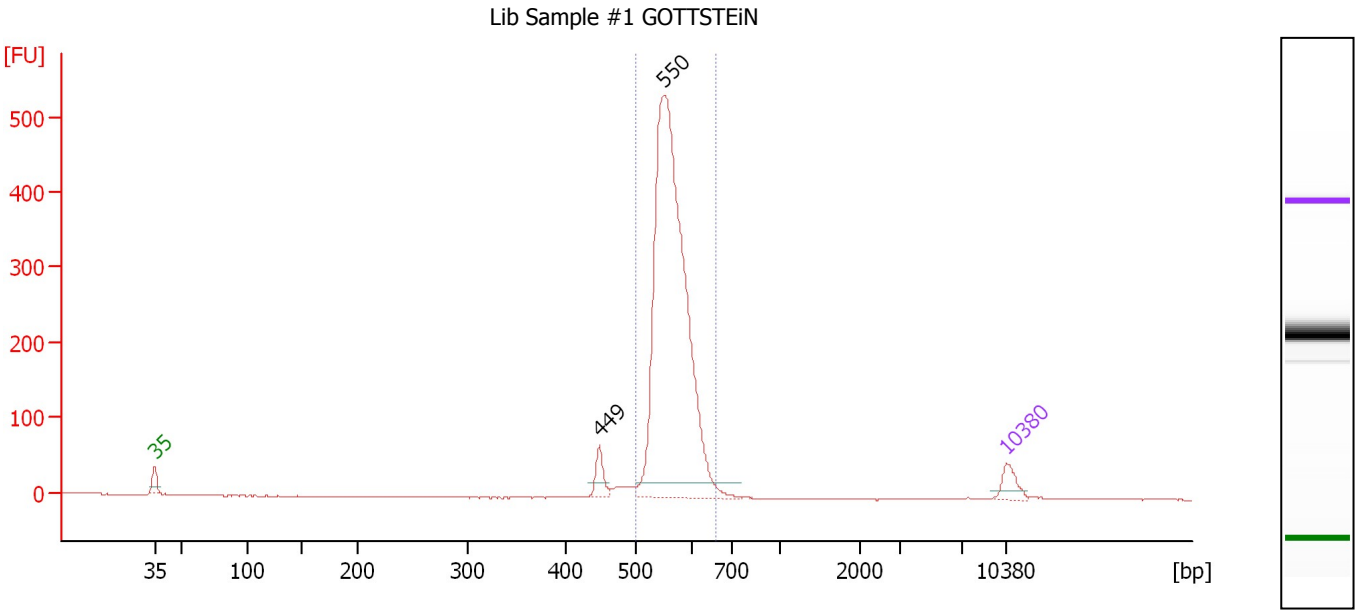
Region table for sample 10 : TS-I5 Index#2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
214	506	326	66,921.6	13,822.25	5,539.9	89	17.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 11 : Lib Sample #1 GOTTSTEiN

Height Threshold [FU] : 20

Overall Results for sample 11 : Lib Sample #1 GOTTSTEiN

Number of peaks found:	2	Corr. Area 1:	1,798.8
Noise:	0.3		

Peak table for sample 11 : Lib Sample #1 GOTTSTEiN

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	449	112.17	378.6	
3	550	3,156.72	8,688.6	
4	10,380	75.00	10.9	Upper Marker

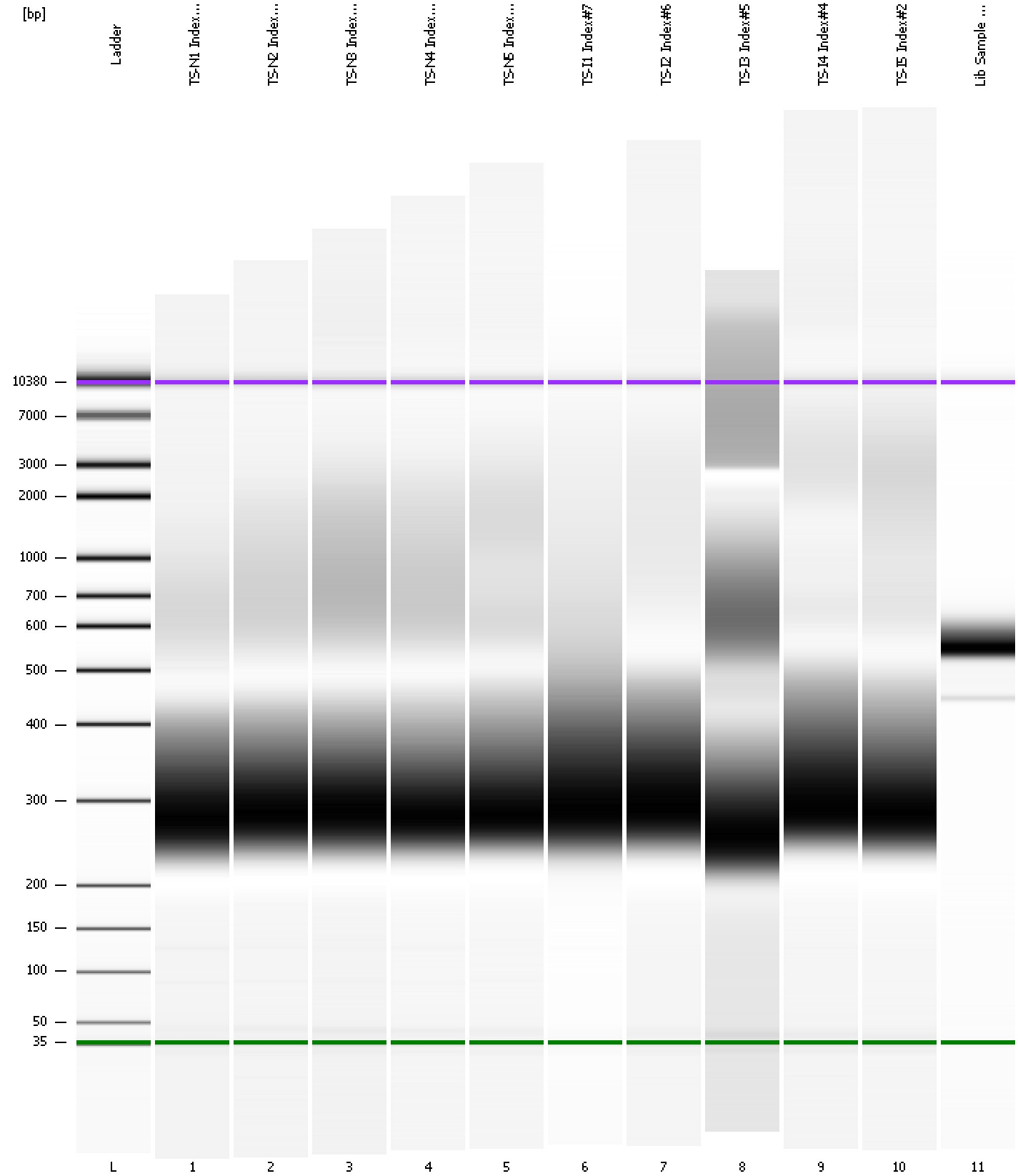
Region table for sample 11 : Lib Sample #1 GOTTSTEiN

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
502	664	566	8,169.9	3,045.56	1,798.8	94	4.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad

Created: 5/24/2012 4:14:20 PM
Modified: 5/24/2012 5:04:23 PM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 12)		Instrument	Run		5/24/2012 4:55:38 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2012-05-24\2012-05-24_004.xad)		Instrument	Run		5/24/2012 4:14:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/24/2012 4:14:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/24/2012 4:14:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/24/2012 4:14:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/24/2012 4:14:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/24/2012 4:14:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/24/2012 4:14:26 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1