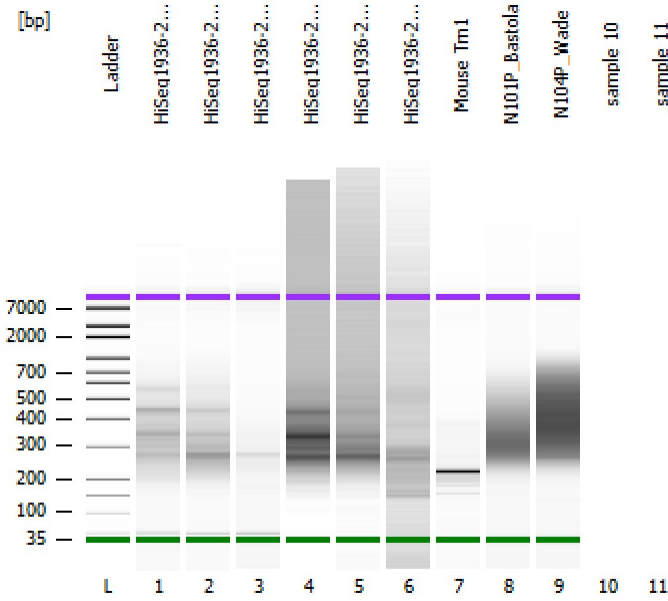


Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electrophoresis File Run Summary



Instrument Information:

Instrument Name: DE34903152 Firmware: C.01.069
 Serial#: DE34903152 Type: G2938C

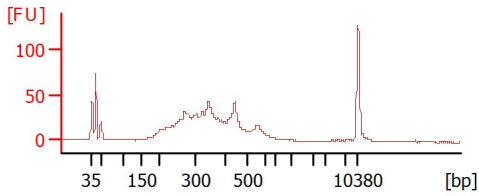
Assay Information:

Assay Origin Path: C:\Program Files (x86)\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

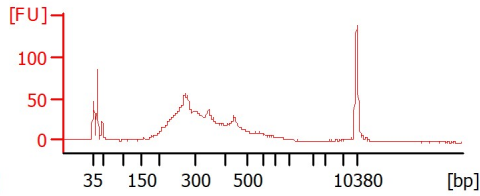
Chip Information:

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

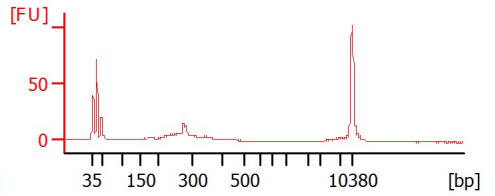
HiSeq1936-22 recond PCR



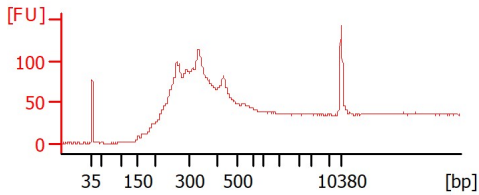
HiSeq1936-23 recond PCR



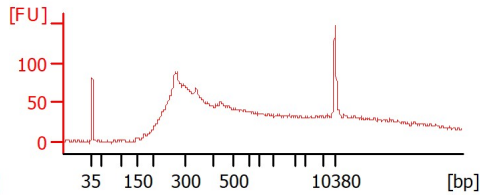
HiSeq1936-23 recond PCR



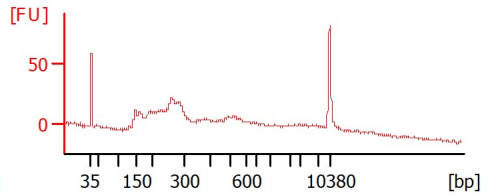
HiSeq1936-22 0.9X BC (1:2)



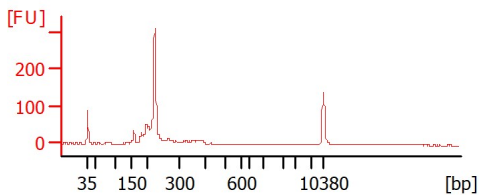
HiSeq1936-23 0.9X BC (1:2)



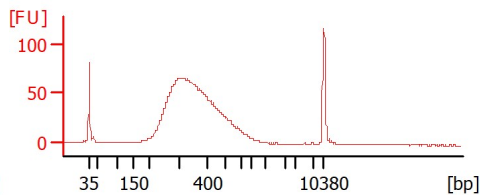
HiSeq1936-24 0.9X BC



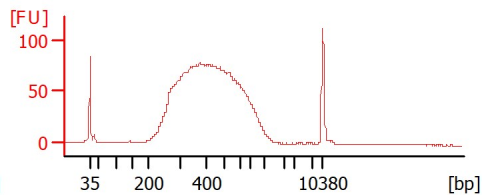
Mouse Trn1



N101P_Bastola



N104P_Wade



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
HiSeq1936-22 recond PCR		<input type="checkbox"/>	✓			
HiSeq1936-23 recond PCR		<input type="checkbox"/>	✓			
HiSeq1936-23 recond PCR		<input type="checkbox"/>	✓			
HiSeq1936-22 0.9X BC (1:2)		<input type="checkbox"/>	✓			
HiSeq1936-23 0.9X BC (1:2)		<input type="checkbox"/>	✓			
HiSeq1936-24 0.9X BC		<input type="checkbox"/>	✓			
Mouse Trn1		<input type="checkbox"/>	✓			
N101P_Bastola		<input type="checkbox"/>	✓			
N104P_Wade		<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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 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

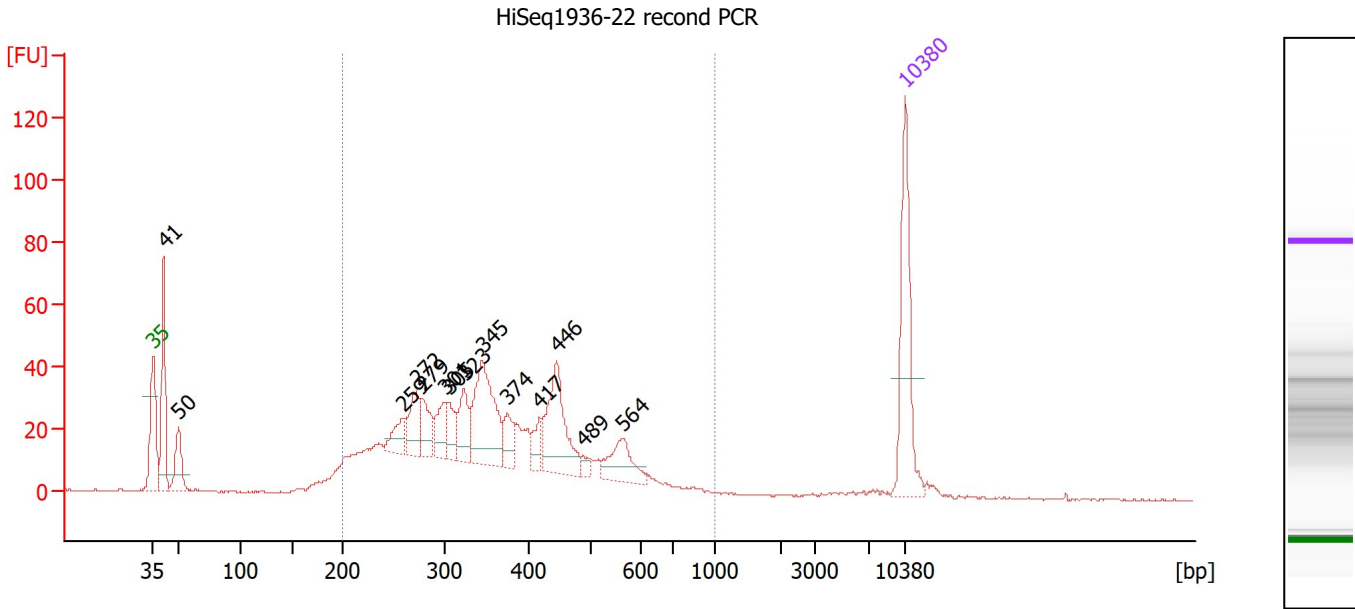
Ladder

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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary



Overall Results for sample 1 : HiSeq1936-22 recond PCR

Number of peaks found: 14 Corr. Area 1: 892.7
 Noise: 0.3

Peak table for sample 1 : HiSeq1936-22 recond PCR

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	106.25	3,901.1	
3	50	43.79	1,325.6	
4	259	24.05	140.5	
5	272	37.91	211.1	
6	279	31.68	172.3	
7	301	28.74	144.7	
8	305	26.24	130.2	
9	323	34.48	161.6	
10	345	101.41	445.9	
11	374	21.76	88.2	
12	417	17.70	64.4	
13	446	81.82	278.1	
14	489	7.20	22.3	
15	564	36.15	97.2	
16	10,380	75.00	10.9	Upper Marker

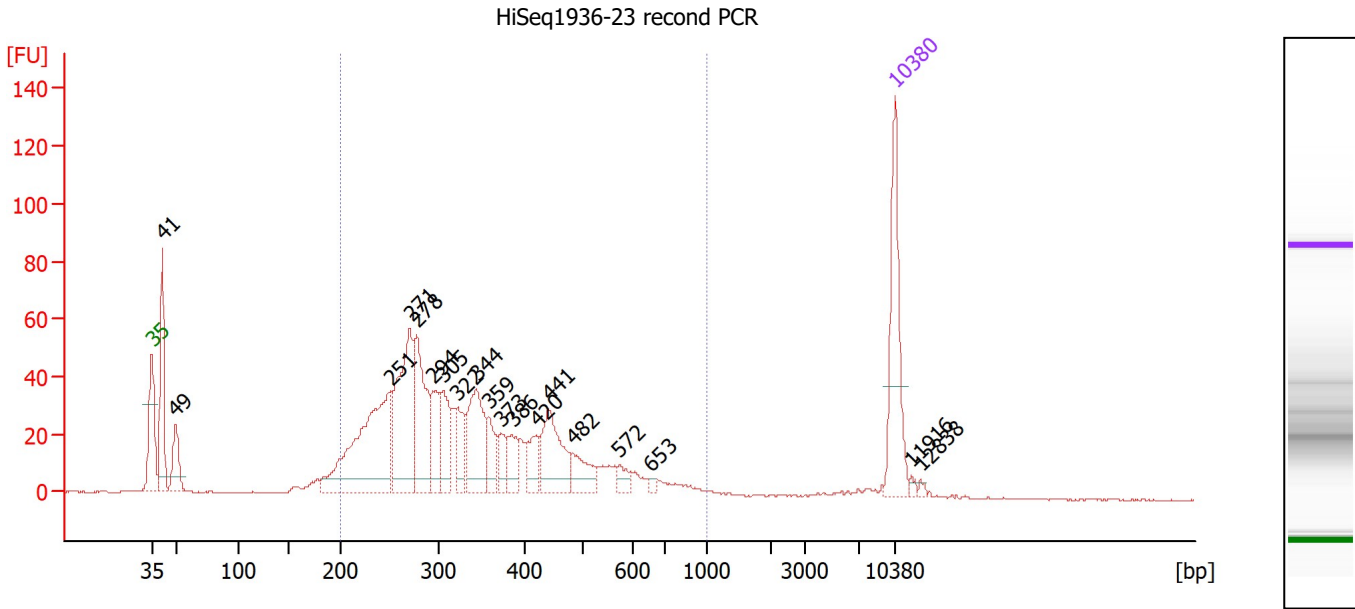
Region table for sample 1 : HiSeq1936-22 recond PCR

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	892.7	84	373	31.5	907.77	4,162.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 2 : HiSeq1936-23 recond PCR

Number of peaks found: 19 Corr. Area 1: 1,022.1
 Noise: 0.2

Peak table for sample 2 : HiSeq1936-23 recond PCR

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	111.42	4,114.6	
3	49	46.34	1,434.2	
4	251	217.23	1,313.1	
5	271	148.74	833.1	
6	278	104.67	571.5	
7	294	46.02	237.5	
8	305	52.00	258.2	
9	322	36.91	174.0	
10	344	81.47	358.6	
11	359	30.80	130.1	
12	373	19.36	78.6	
13	386	27.99	109.9	
14	420	27.10	97.7	
15	441	69.59	239.3	
16	482	30.25	95.0	
17	572	11.09	29.4	
18	653	3.44	8.0	
19	10,380	75.00	10.9	Upper Marker
20	11,916	0.00	0.0	
21	12,838	0.00	0.0	

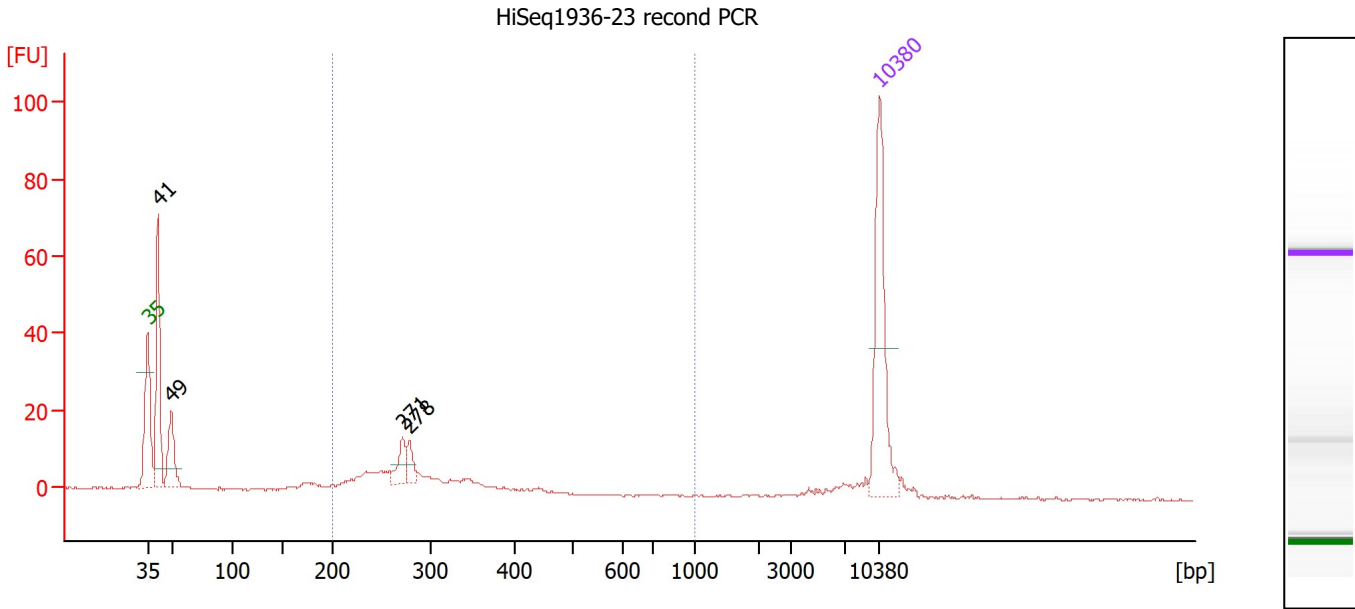
Region table for sample 2 : HiSeq1936-23 recond PCR

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,022.1	84	353	35.0	1,018.63	4,968.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 3 : HiSeq1936-23 recond PCR

Number of peaks found: 4 Corr. Area 1: 107.2
 Noise: 0.2

Peak table for sample 3 : HiSeq1936-23 recond PCR

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	41	114.14	4,173.0	
3	49	49.47	1,524.3	
4	271	20.00	111.7	
5	278	13.38	72.8	
6	10,380	75.00	10.9	Upper Marker

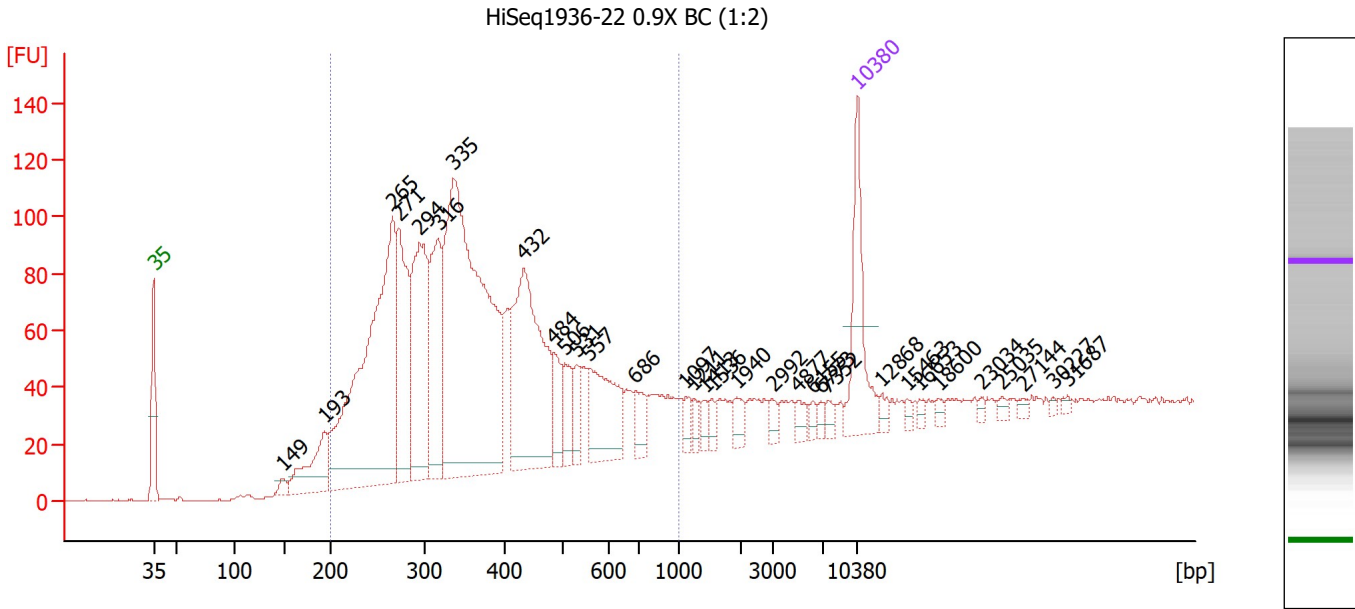
Region table for sample 3 : HiSeq1936-23 recond PCR

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	107.2	43	288	18.3	130.88	713.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 4 : HiSeq1936-22 0.9X BC (1:2)

Number of peaks found: 32 Corr. Area 1: 2,220.0
 Noise: 0.2

Peak table for sample 4 : HiSeq1936-22 0.9X BC (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	149	11.39	115.6	
3	193	80.58	633.4	
4	265	500.09	2,856.6	
5	271	164.98	922.7	
6	294	201.58	1,040.3	
7	316	138.04	662.3	
8	335	593.23	2,682.2	
9	432	249.33	875.4	
10	484	35.60	111.4	
11	506	39.45	118.2	
12	531	25.00	71.4	
13	557	95.04	258.7	
14	686	26.77	59.1	
15	1,097	12.08	16.7	
16	1,211	9.87	12.3	
17	1,413	8.50	9.1	
18	1,536	8.28	8.2	
19	1,940	14.70	11.5	
20	2,992	8.84	4.5	
21	4,877	10.45	3.2	
22	6,155	6.66	1.6	
23	6,773	5.29	1.2	
24	7,352	7.50	1.5	
25	10,380	75.00	10.9	Upper Marker
26	12,868	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...

... Peak table for sample 4 : HiSeq1936-22 0.9X BC (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	15,463	0.00	0.0	
28	16,653	0.00	0.0	
29	18,600	0.00	0.0	
30	23,034	0.00	0.0	
31	25,035	0.00	0.0	
32	27,144	0.00	0.0	
33	30,227	0.00	0.0	
34	31,687	0.00	0.0	

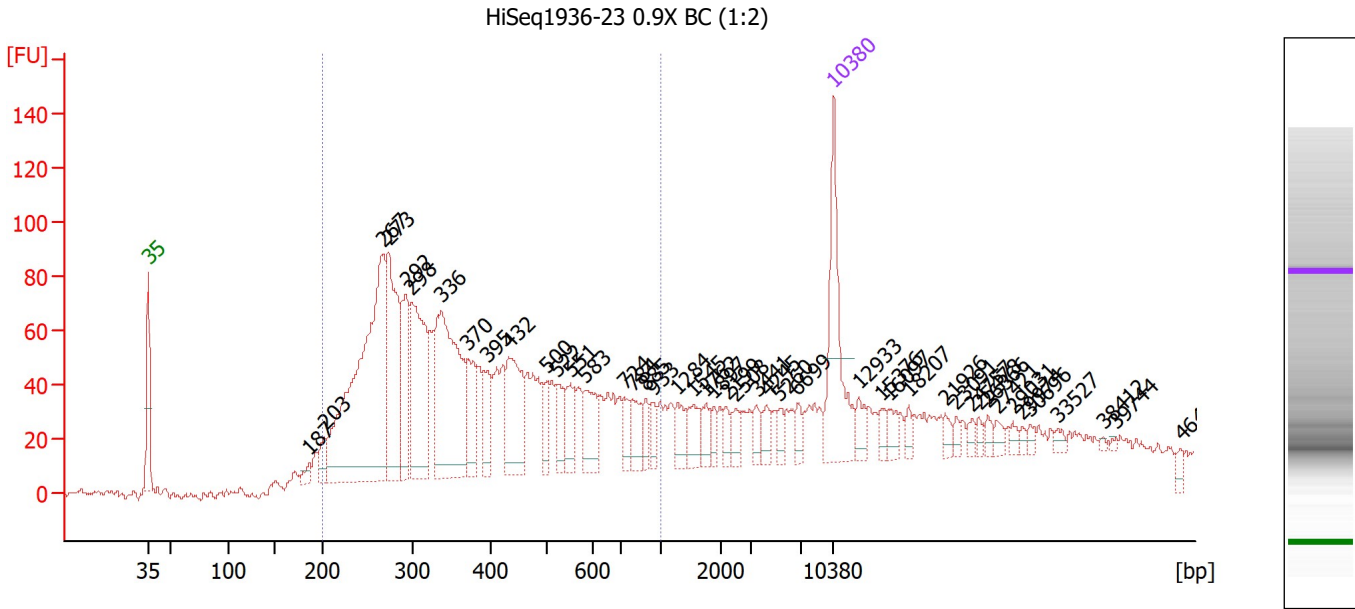
Region table for sample 4 : HiSeq1936-22 0.9X BC (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	2,220.0	86	386	37.7	2,047.82	9,326.2	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 5 : HiSeq1936-23 0.9X BC (1:2)

Number of peaks found: 45 Corr. Area 1: 1,917.1
 Noise: 1.4

Peak table for sample 5 : HiSeq1936-23 0.9X BC (1:2)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	187	9.27	75.3	
3	203	20.66	154.0	
4	267	350.61	1,991.5	
5	273	143.95	798.5	
6	292	71.20	369.7	
7	298	139.57	710.6	
8	336	189.51	854.2	
9	370	42.63	174.7	
10	395	30.38	116.6	
11	432	76.42	267.8	
12	500	21.38	64.8	
13	522	24.24	70.4	
14	551	27.14	74.6	
15	583	35.21	91.5	
16	724	14.37	30.1	
17	784	22.28	43.0	
18	885	12.37	21.2	
19	933	12.57	20.4	
20	1,284	19.12	22.6	
21	1,545	16.66	16.3	
22	1,762	12.36	10.6	
23	1,897	8.46	6.8	
24	2,199	8.10	5.6	
25	2,508	10.76	6.5	
26	3,441	9.04	4.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...

... Peak table for sample 5 : HiSeq1936-23 0.9X BC (1:2)

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
27	4,245	10.67	3.8	
28	5,260	8.07	2.3	
29	6,699	8.26	1.9	
30	10,380	75.00	10.9	Upper Marker
31	12,933	0.00	0.0	
32	15,376	0.00	0.0	
33	16,097	0.00	0.0	
34	18,207	0.00	0.0	
35	21,926	0.00	0.0	
36	23,091	0.00	0.0	
37	24,757	0.00	0.0	
38	25,478	0.00	0.0	
39	26,366	0.00	0.0	
40	27,421	0.00	0.0	
41	29,031	0.00	0.0	
42	29,974	0.00	0.0	
43	30,696	0.00	0.0	
44	33,527	0.00	0.0	
45	38,412	0.00	0.0	
46	39,744	0.00	0.0	
47	46,460	0.00	0.0	

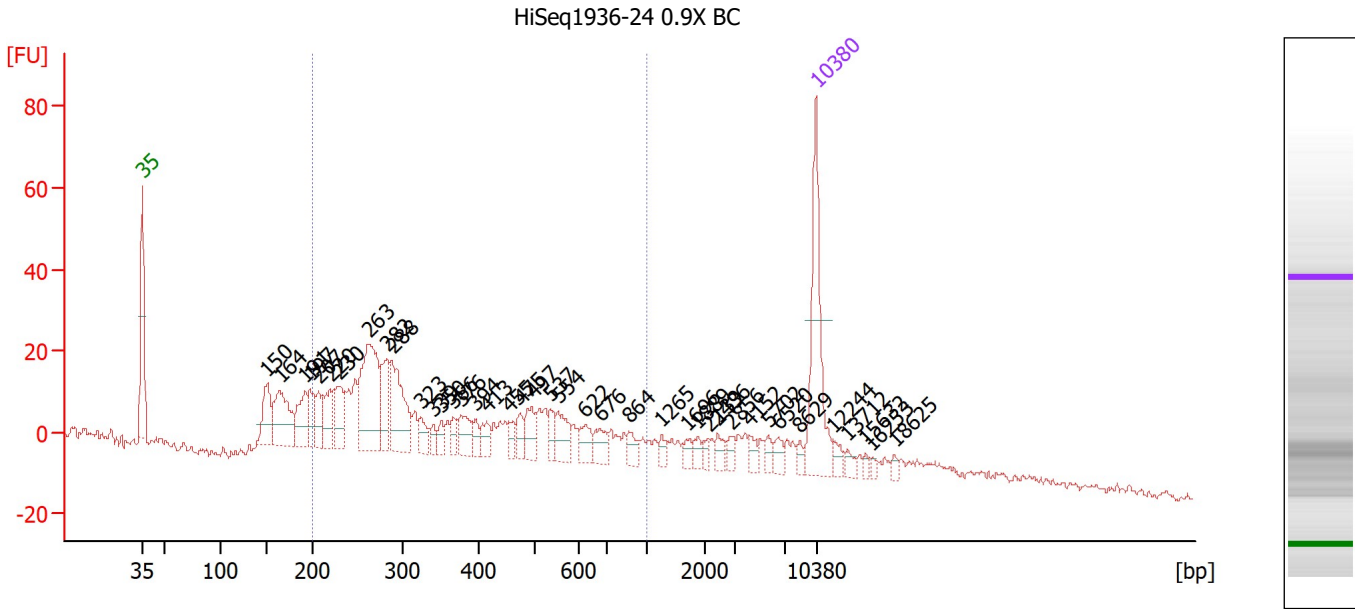
Region table for sample 5 : HiSeq1936-23 0.9X BC (1:2)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/µl]	Molarity [pmol/l]	Color
200	1,000	1,917.1	73	410	42.0	1,547.81	6,946.7	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HiSeq1936-24 0.9X BC

Number of peaks found: 40 Corr. Area 1: 472.3
 Noise: 1.0

Peak table for sample 6 : HiSeq1936-24 0.9X BC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	150	44.00	444.6	
3	164	70.28	649.4	
4	191	39.91	316.0	
5	197	27.98	215.0	
6	207	23.19	170.0	
7	220	32.12	221.6	
8	230	36.37	239.9	
9	263	113.64	654.9	
10	282	39.88	214.4	
11	288	72.01	379.1	
12	323	14.52	68.1	
13	339	8.36	37.3	
14	350	9.74	42.1	
15	366	10.62	43.9	
16	376	22.76	91.7	
17	394	9.46	36.4	
18	413	13.37	49.0	
19	455	10.32	34.4	
20	475	13.45	42.9	
21	497	19.96	60.9	
22	537	11.73	33.1	
23	554	22.73	62.2	
24	622	15.80	38.5	
25	676	15.49	34.7	
26	864	10.83	19.0	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...

... Peak table for sample 6 : HiSeq1936-24 0.9X BC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	1,265	6.44	7.7	
28	1,696	6.14	5.5	
29	1,889	6.38	5.1	
30	2,139	4.93	3.5	
31	2,436	7.57	4.7	
32	2,856	6.52	3.5	
33	4,152	6.96	2.5	
34	5,702	5.84	1.6	
35	6,520	7.97	1.9	
36	8,629	4.72	0.8	
37	10,380	75.00	10.9	Upper Marker
38	12,244	0.00	0.0	
39	13,712	0.00	0.0	
40	15,632	0.00	0.0	
41	16,253	0.00	0.0	
42	18,625	0.00	0.0	

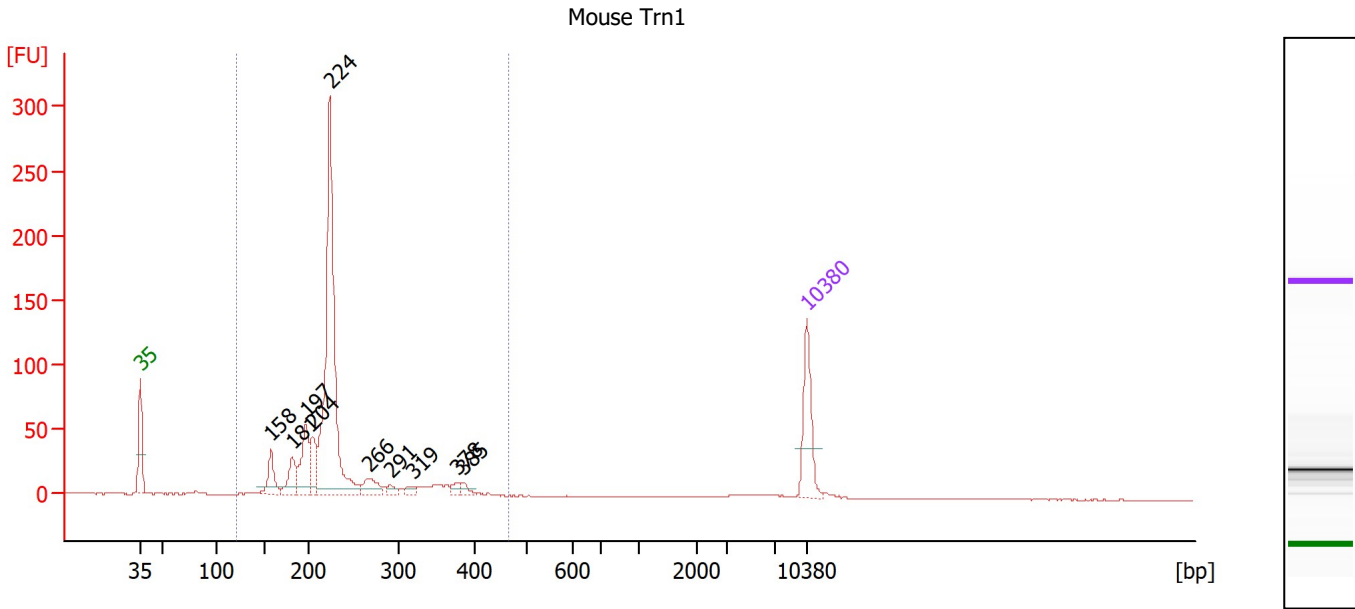
Region table for sample 6 : HiSeq1936-24 0.9X BC

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	472.3	66	398	44.4	629.39	2,991.8	

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Mouse Trn1

Number of peaks found: 10 Corr. Area 1: 861.8
 Noise: 0.3

Peak table for sample 7 : Mouse Trn1

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	158	55.13	527.1	
3	181	55.50	463.4	
4	197	91.46	704.3	
5	204	60.92	452.7	
6	224	562.06	3,808.0	
7	266	34.30	195.3	
8	291	11.07	57.7	
9	319	11.01	52.4	
10	378	11.17	44.8	
11	385	12.25	48.2	
12	10,380	75.00	10.9	Upper Marker

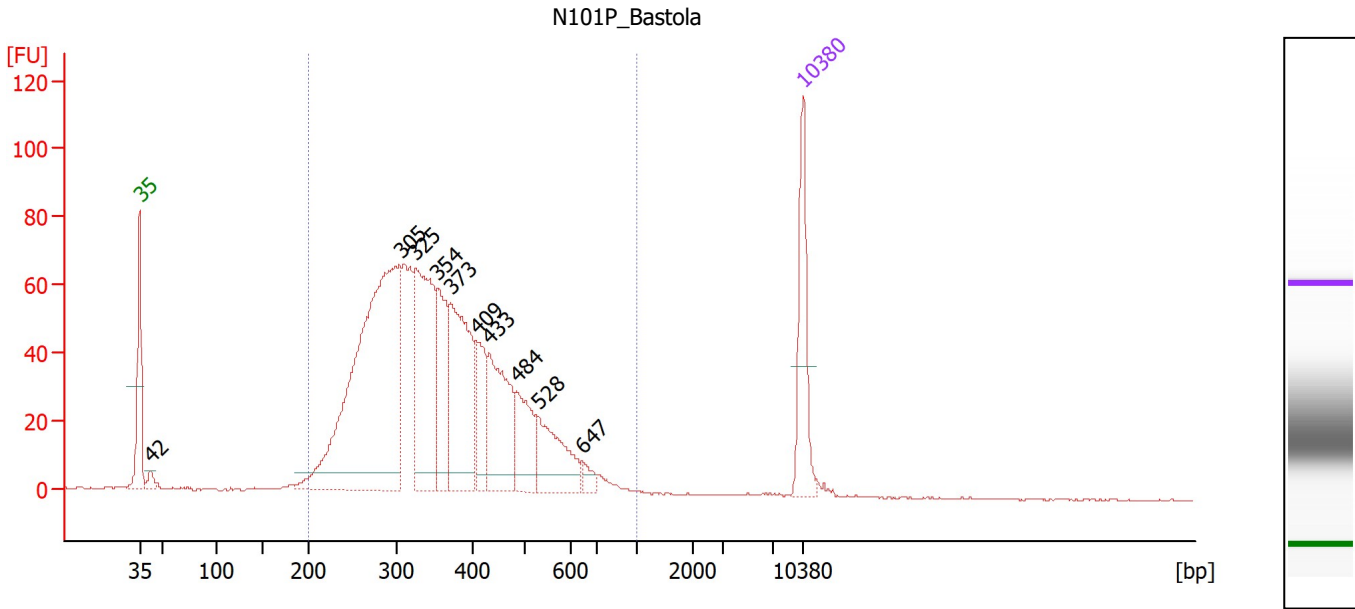
Region table for sample 7 : Mouse Trn1

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
122	463	861.8	95	233	21.9	965.10	6,593.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 8 : N101P Bastola

Number of peaks found: 10 Corr. Area 1: 1,518.9
 Noise: 0.2

Peak table for sample 8 : N101P Bastola

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	12.77	455.6	
3	305	611.01	3,037.9	
4	325	236.12	1,100.1	
5	354	105.89	453.0	
6	373	202.34	823.0	
7	409	67.51	250.1	
8	433	132.12	462.3	
9	484	73.02	228.7	
10	528	85.55	245.3	
11	647	12.22	28.6	
12	10,380	75.00	10.9	Upper Marker

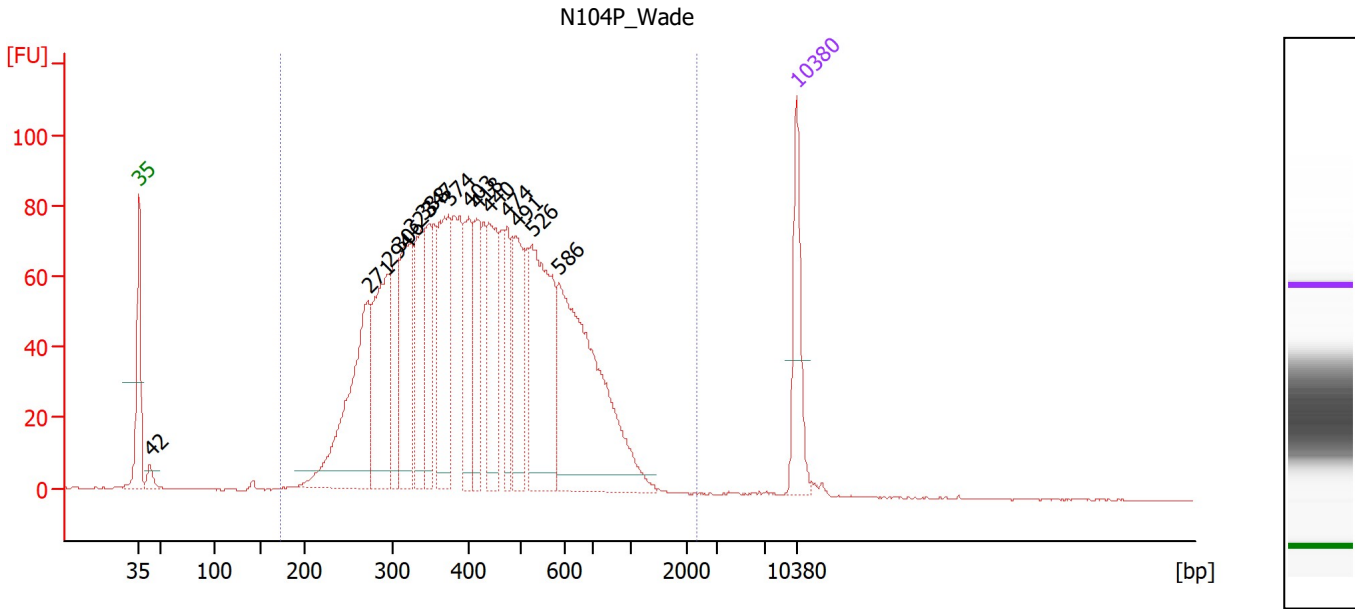
Region table for sample 8 : N101P Bastola

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	1,518.9	97	369	28.6	1,745.39	7,893.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Electropherogram Summary Continued ...



Overall Results for sample 9 : N104P_Wade

Number of peaks found: 15 Corr. Area 1: 2,352.0
 Noise: 0.2

Peak table for sample 9 : N104P_Wade

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	42	19.52	701.3	
3	271	298.81	1,668.9	
4	294	205.29	1,056.7	
5	306	104.20	515.5	
6	323	189.13	886.2	
7	338	137.18	614.3	
8	347	90.86	396.8	
9	374	182.08	737.6	
10	403	114.28	430.1	
11	418	94.17	341.6	
12	440	126.84	436.9	
13	474	75.24	240.4	
14	491	126.79	391.0	
15	526	243.78	702.5	
16	586	374.44	967.8	
17	10,380	75.00	10.9	Upper Marker

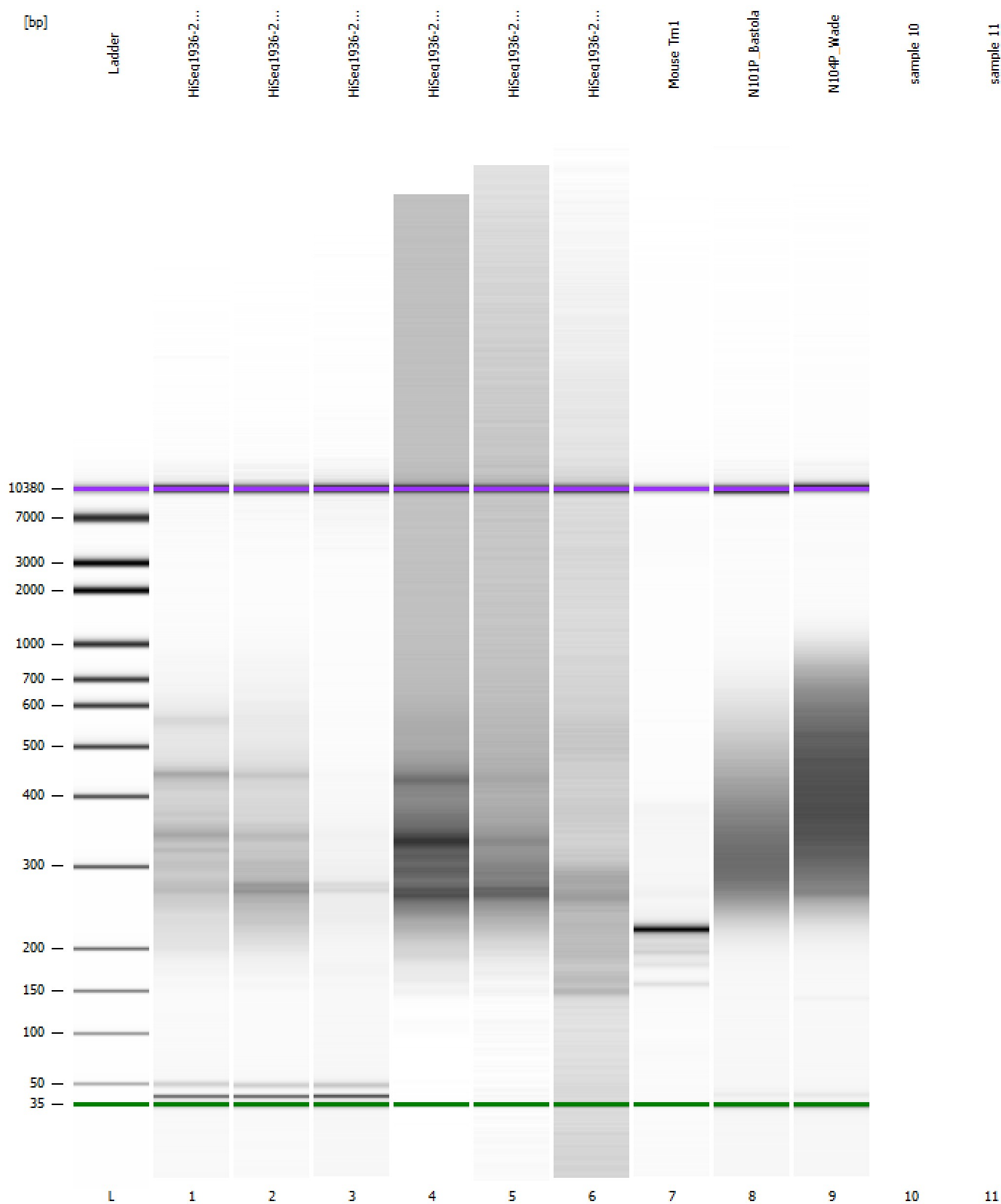
Region table for sample 9 : N104P_Wade

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
172	2,356	2,352.0	99	451	37.6	2,829.72	11,139.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
Modified: 12/12/2019 9:07:44 AM

Gel Image

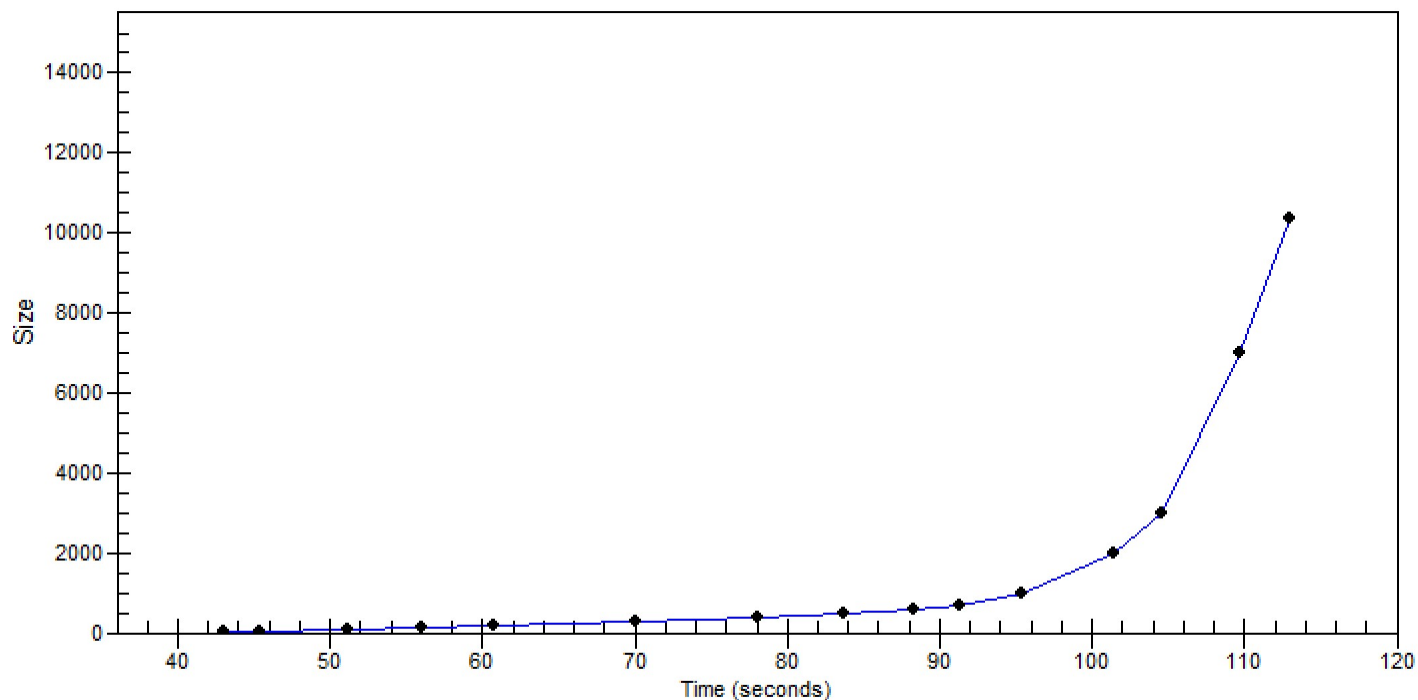


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
Modified: 12/12/2019 9:07:44 AM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
Modified: 12/12/2019 9:07:44 AM

Invalid Samples

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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2019-12-12_002.xad

Created: 12/12/2019 8:24:17 AM
 Modified: 12/12/2019 9:07:44 AM

Run Logbook

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 10)		Instrument	Run		12/12/2019 8:59:54 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2019-12-12\Bioanalyze r1_High Sensitivity DNA Assay_2019-12-12_002.xad)		Instrument	Run		12/12/2019 8:24:23 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		12/12/2019 8:24:23 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		12/12/2019 8:24:23 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		12/12/2019 8:24:23 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		12/12/2019 8:24:23 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		12/12/2019 8:24:23 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		12/12/2019 8:24:23 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB