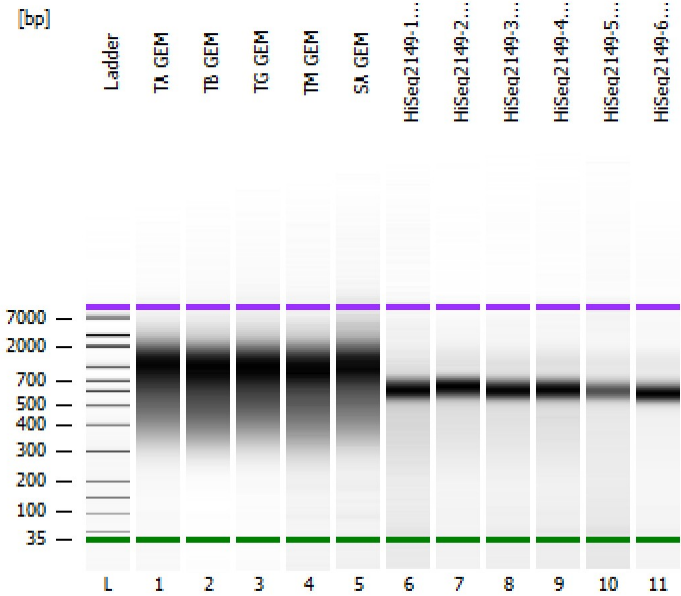


Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
Modified: 10/20/2020 12:50:26 PM

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

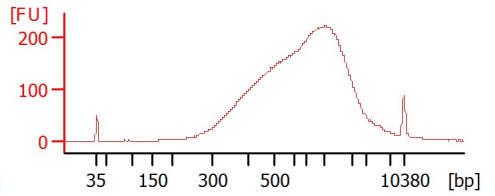
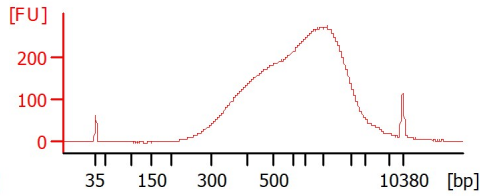
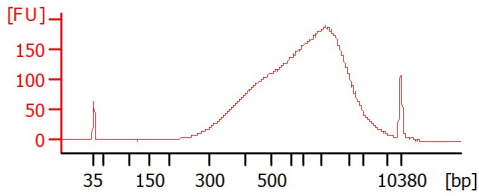
Chip Information:

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

TA GEM

TB GEM

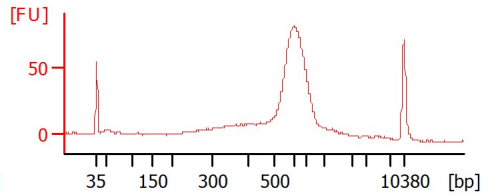
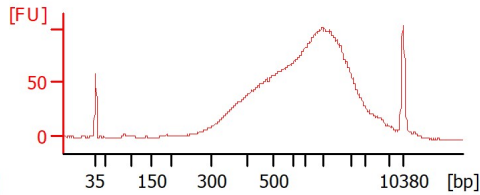
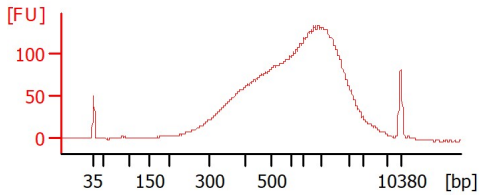
TG GEM



TM GEM

SA GEM

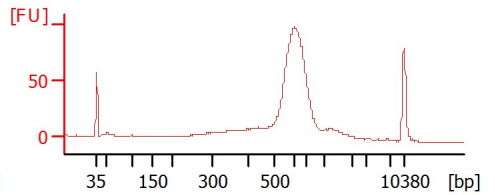
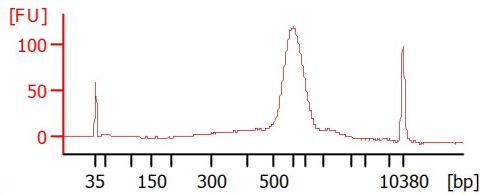
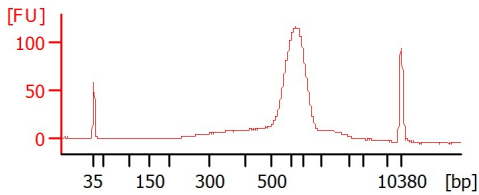
HiSeq2149-1 lib (1:10)



HiSeq2149-2 lib (1:10)

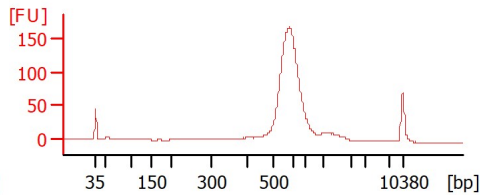
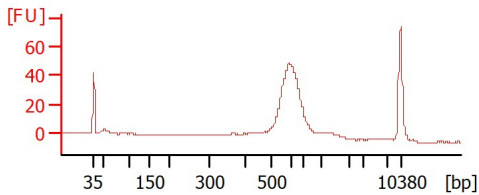
HiSeq2149-3 lib (1:10)

HiSeq2149-4 lib (1:10)



HiSeq2149-5 lib (1:10)

HiSeq2149-6 lib (1:10)



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
TA GEM		<input type="checkbox"/>	✓			
TB GEM		<input type="checkbox"/>	✓			
TG GEM		<input type="checkbox"/>	✓			
TM GEM		<input type="checkbox"/>	✓			
SA GEM		<input type="checkbox"/>	✓			
HiSeq2149-1 lib (1:10)		<input type="checkbox"/>	✓			
HiSeq2149-2 lib (1:10)		<input type="checkbox"/>	✓			
HiSeq2149-3 lib (1:10)		<input type="checkbox"/>	✓			
HiSeq2149-4 lib (1:10)		<input type="checkbox"/>	✓			
HiSeq2149-5 lib (1:10)		<input type="checkbox"/>	✓			
HiSeq2149-6 lib (1:10)		<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_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 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

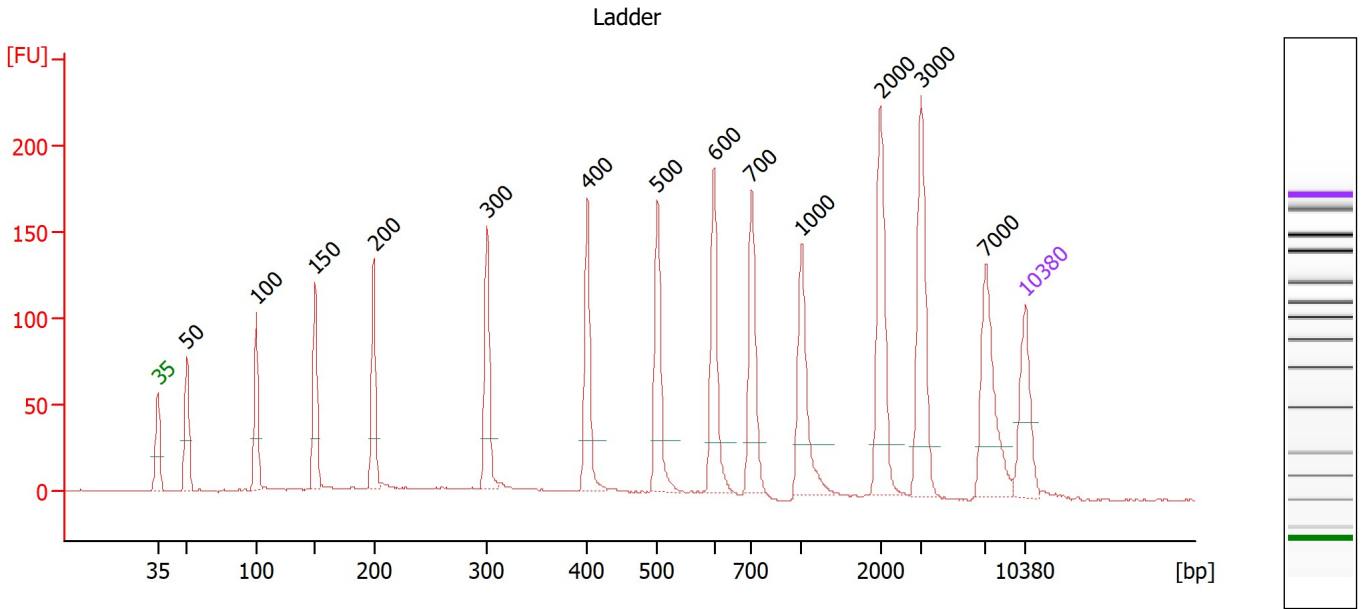
Ladder

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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.4

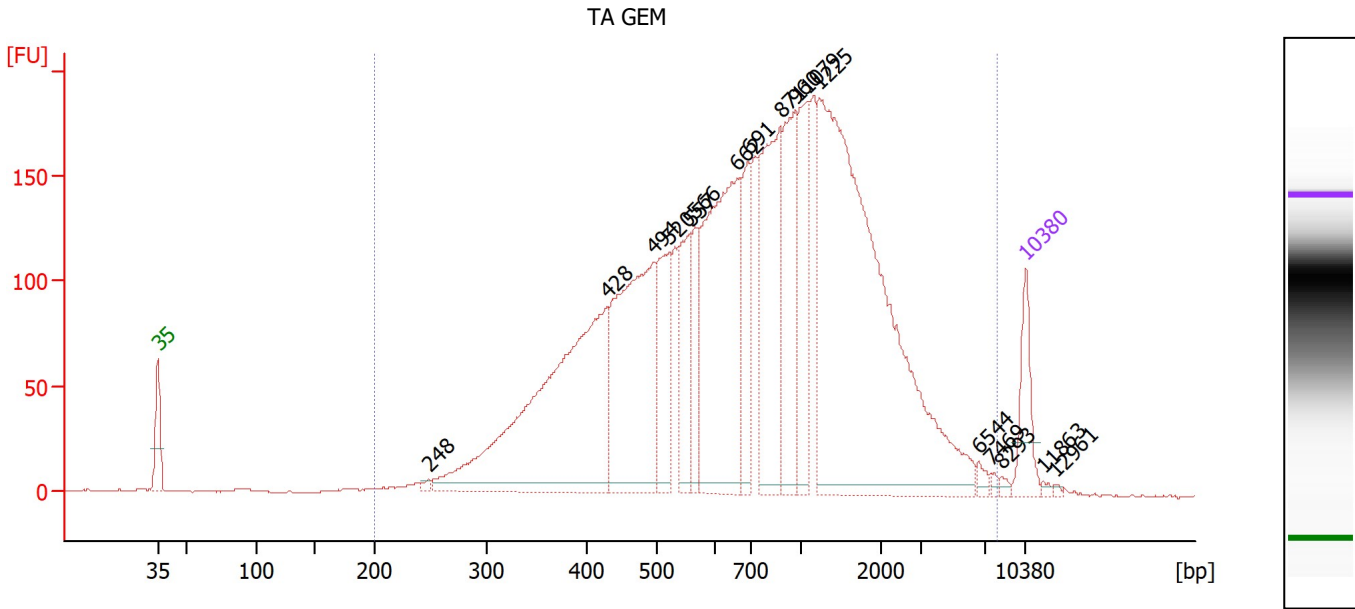
Peak table for Ladder

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: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : TA GEM

Number of peaks found: 17 Corr. Area 1: 4,634.4
 Noise: 0.4

Peak table for sample 1 : TA GEM

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	248	7.89	48.2	
3	428	840.06	2,972.6	
4	494	533.82	1,637.3	
5	520	172.74	503.5	
6	557	151.26	411.2	
7	566	106.28	284.3	
8	662	558.22	1,277.0	
9	691	165.47	362.7	
10	871	342.31	595.7	
11	960	221.88	350.1	
12	1,079	192.69	270.6	
13	1,225	1,131.28	1,398.9	
14	6,544	11.34	2.6	
15	7,469	5.57	1.1	
16	8,293	6.47	1.2	
17	10,380	75.00	10.9	Upper Marker
18	11,863	0.00	0.0	
19	12,961	0.00	0.0	

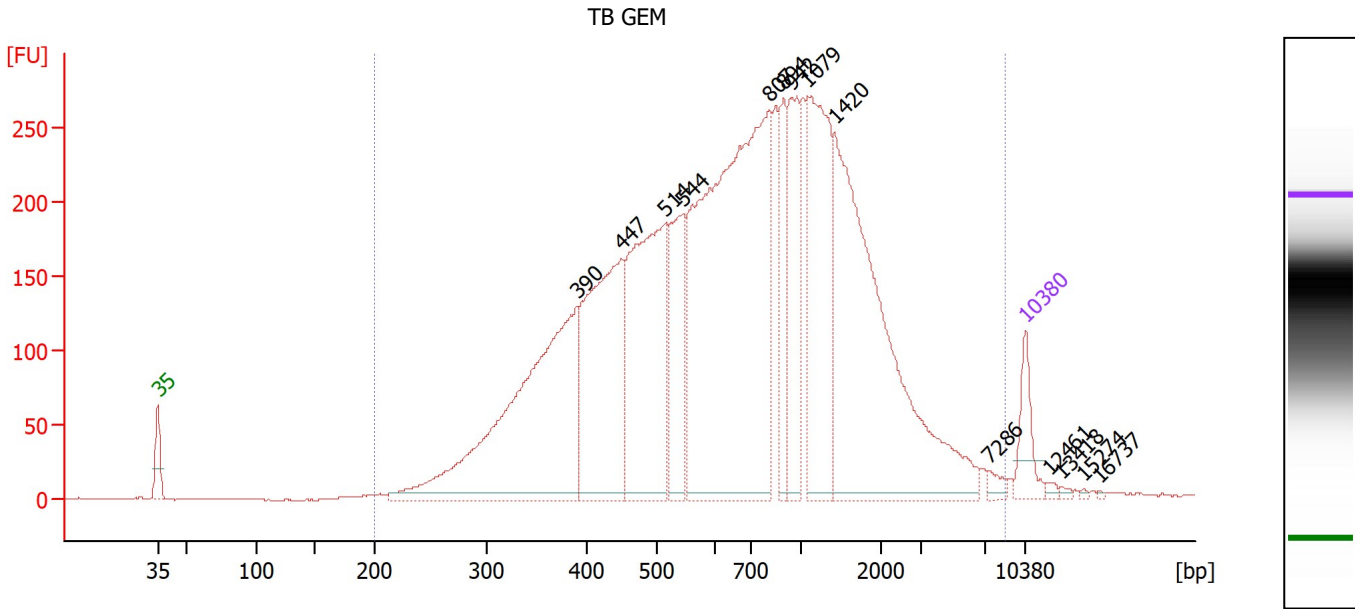
Region table for sample 1 : TA GEM

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	7,909	4,634.4	99	1,062	88.2	4,864.02	11,836.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : TB GEM

Number of peaks found: 14 Corr. Area 1: 7,091.8
 Noise: 0.4

Peak table for sample 2 : TB GEM

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	390	1,050.37	4,081.8	
3	447	675.68	2,288.0	
4	514	711.72	2,098.7	
5	544	294.12	819.0	
6	807	1,522.39	2,859.2	
7	894	172.24	291.8	
8	942	247.66	398.3	
9	1,079	485.50	681.9	
10	1,420	962.46	1,027.0	
11	7,286	18.30	3.8	
12	10,380	75.00	10.9	Upper Marker
13	12,461	0.00	0.0	
14	13,418	0.00	0.0	
15	15,274	0.00	0.0	
16	16,737	0.00	0.0	

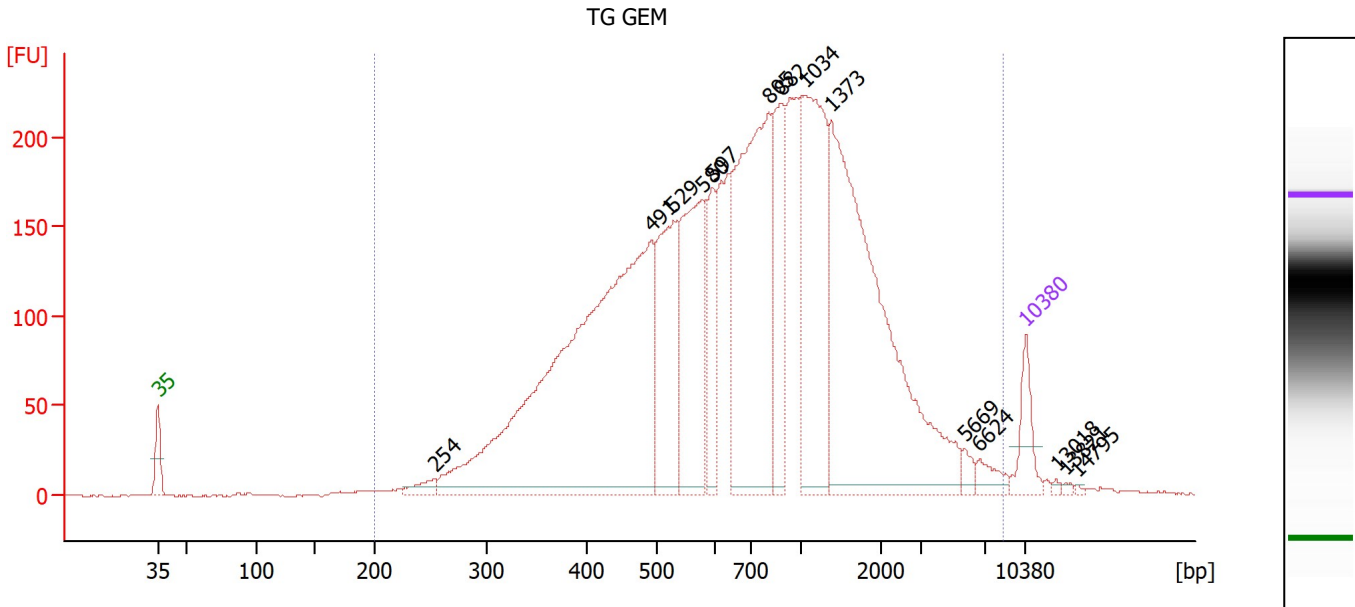
Region table for sample 2 : TB GEM

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	8,545	7,091.8	99	995	94.7	6,594.94	17,031.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : TG GEM

Number of peaks found: 14 Corr. Area 1: 5,621.0
 Noise: 0.7

Peak table for sample 3 : TG GEM

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	254	40.02	238.9	
3	491	1,878.17	5,799.2	
4	529	395.60	1,133.5	
5	580	465.79	1,217.0	
6	597	168.64	428.3	
7	805	814.24	1,532.1	
8	882	265.88	456.6	
9	1,034	551.55	808.2	
10	1,373	1,085.85	1,198.0	
11	5,669	22.27	6.0	
12	6,624	34.58	7.9	
13	10,380	75.00	10.9	Upper Marker
14	13,018	0.00	0.0	
15	13,821	0.00	0.0	
16	14,795	0.00	0.0	

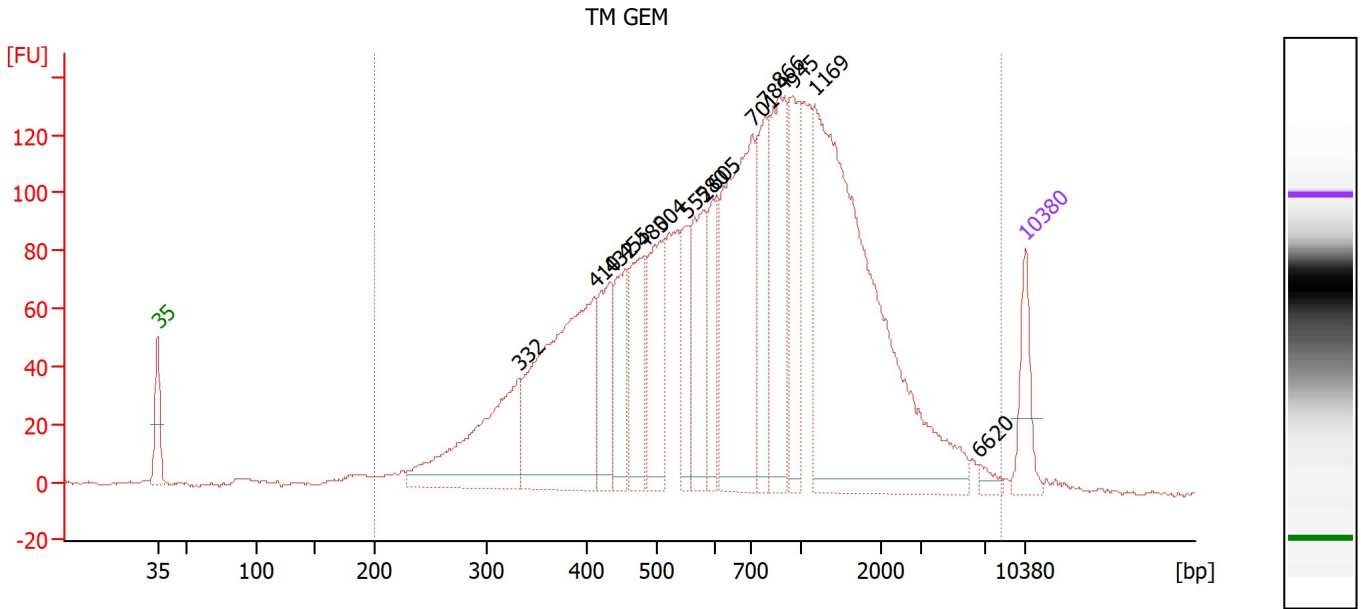
Region table for sample 3 : TG GEM

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	8,531	5,621.0	99	1,038	95.1	6,584.51	16,424.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : TM GEM

Number of peaks found: 15 Corr. Area 1: 3,421.6
 Noise: 0.5

Peak table for sample 4 : TM GEM

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	332	371.30	1,694.6	
3	410	589.22	2,176.8	
4	432	165.02	578.2	
5	455	151.67	505.3	
6	480	173.68	548.3	
7	504	196.50	590.7	
8	552	103.07	282.7	
9	580	206.60	539.6	
10	605	122.08	306.0	
11	701	499.54	1,079.4	
12	784	188.87	365.1	
13	866	269.79	471.9	
14	945	174.66	280.1	
15	1,169	961.15	1,245.9	
16	6,620	15.08	3.5	
17	10,380	75.00	10.9	Upper Marker

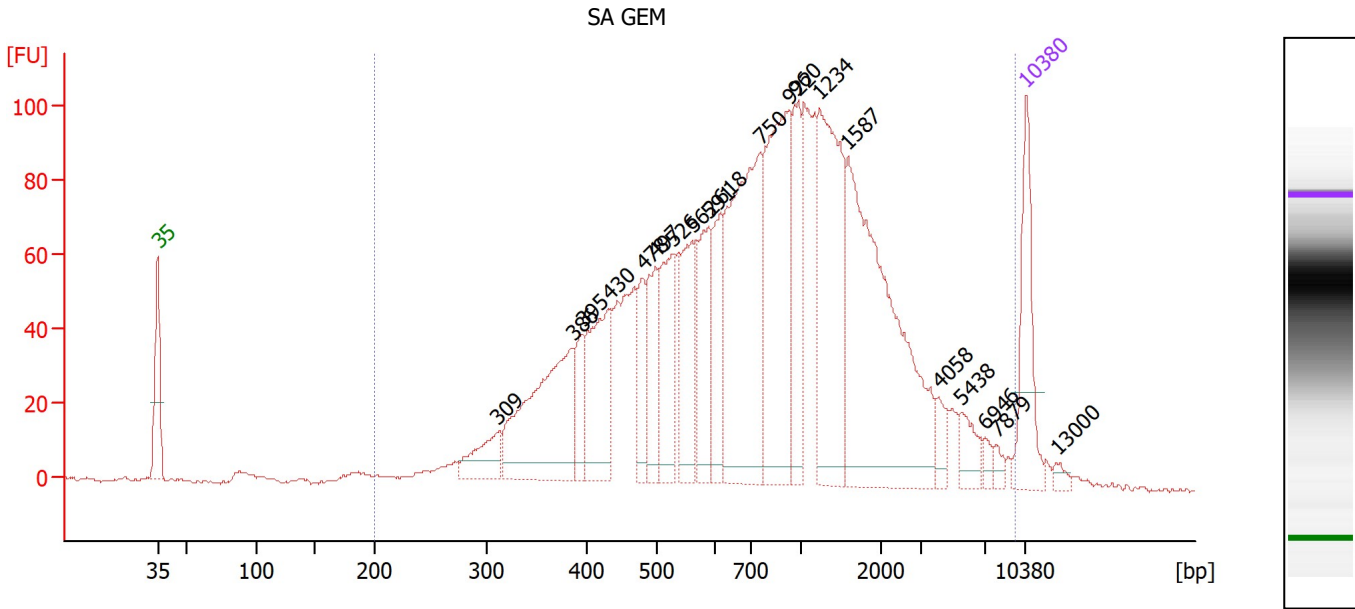
Region table for sample 4 : TM GEM

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	8,230	3,421.6	99	986	91.8	4,588.36	12,007.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : SA GEM

Number of peaks found: 20 Corr. Area 1: 2,486.6
 Noise: 0.5

Peak table for sample 5 : SA GEM

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	309	50.98	249.9	
3	386	209.33	821.9	
4	395	42.82	164.3	
5	430	125.82	443.8	
6	478	52.39	166.0	
7	497	74.77	228.0	
8	526	101.71	293.1	
9	562	102.52	276.6	
10	591	86.67	222.1	
11	618	72.61	178.0	
12	750	284.27	574.5	
13	922	222.73	365.8	
14	960	95.73	151.0	
15	1,234	203.19	249.4	
16	1,587	326.07	311.3	
17	4,058	17.00	6.3	
18	5,438	24.67	6.9	
19	6,946	7.12	1.6	
20	7,879	6.96	1.3	
21	10,380	75.00	10.9	Upper Marker
22	13,000	0.00	0.0	

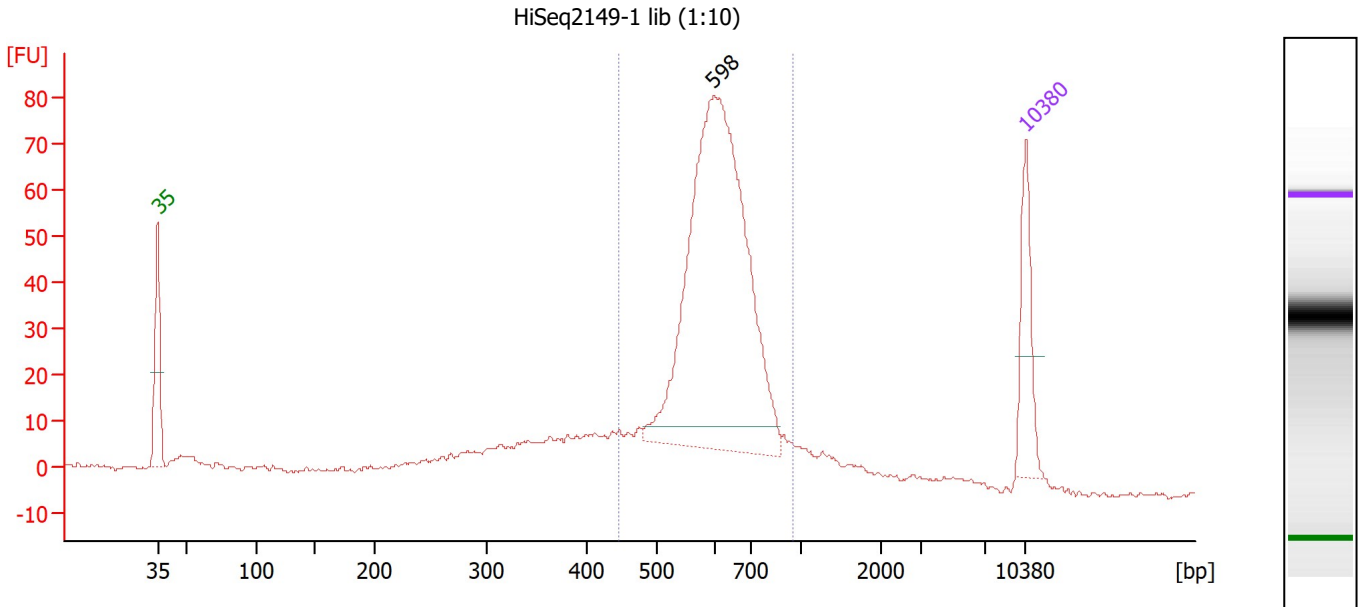
Region table for sample 5 : SA GEM

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	9,405	2,486.6	98	1,203	100.0	2,507.66	5,942.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : HiSeq2149-1 lib (1:10)

Number of peaks found: 1 Corr. Area 1: 583.7
 Noise: 0.5

Peak table for sample 6 : HiSeq2149-1 lib (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	598	752.75	1,906.6	
3	10,380	75.00	10.9	Upper Marker

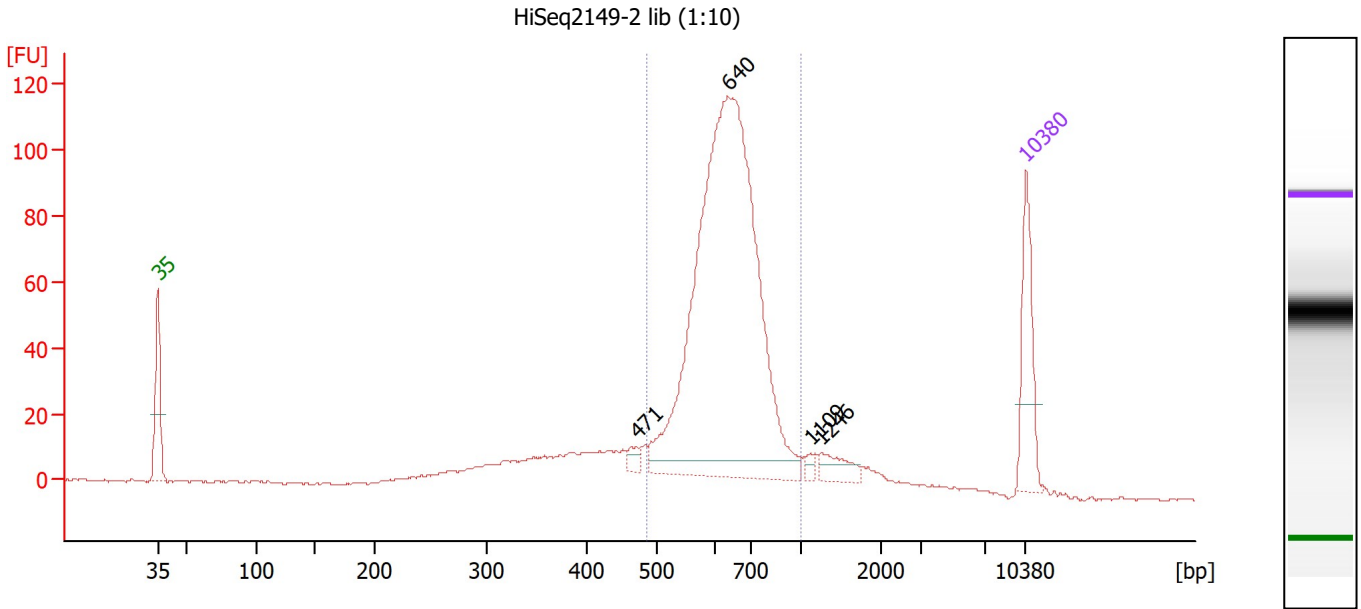
Region table for sample 6 : HiSeq2149-1 lib (1:10)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
444	946	583.7	72	619	14.0	962.11	2,407.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
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Electropherogram Summary Continued ...



Overall Results for sample 7 : HiSeq2149-2 lib (1:10)

Number of peaks found: 4 Corr. Area 1: 780.9
 Noise: 0.3

Peak table for sample 7 : HiSeq2149-2 lib (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	471	11.61	37.4	
3	640	890.09	2,105.9	
4	1,109	7.06	9.6	
5	1,246	25.74	31.3	
6	10,380	75.00	10.9	Upper Marker

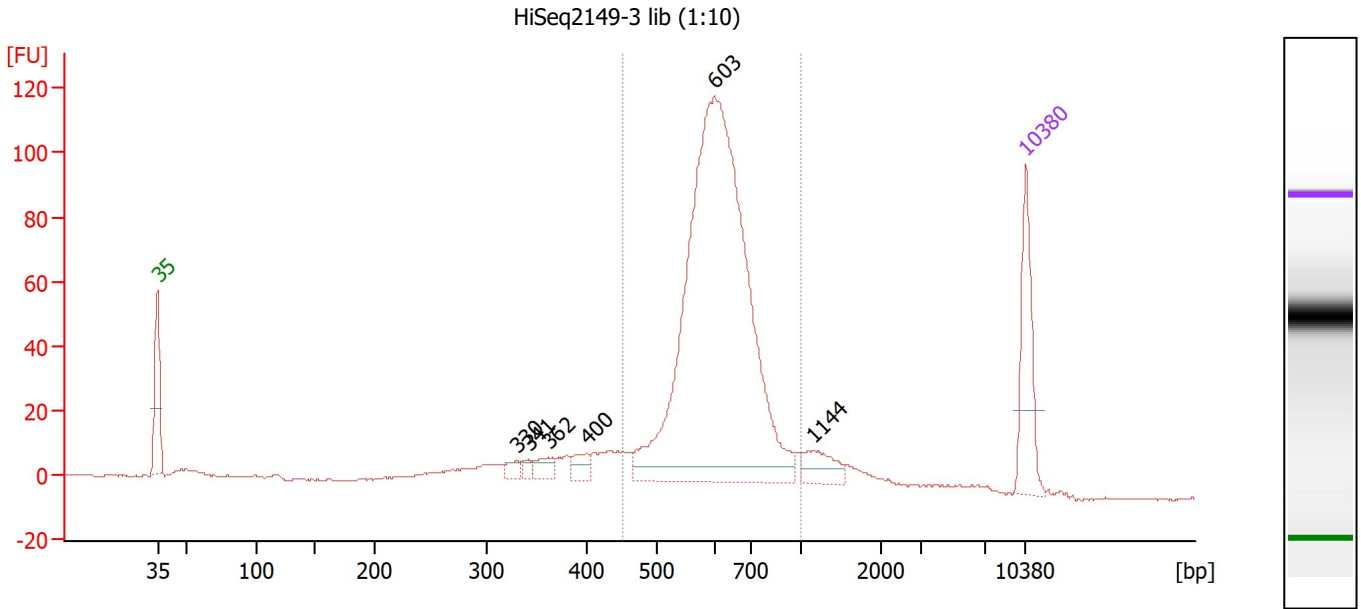
Region table for sample 7 : HiSeq2149-2 lib (1:10)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
484	1,000	780.9	74	646	13.9	966.93	2,311.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
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Electropherogram Summary Continued ...



Overall Results for sample 8 : HiSeq2149-3 lib (1:10)

Number of peaks found: 6 Corr. Area 1: 783.1
 Noise: 0.2

Peak table for sample 8 : HiSeq2149-3 lib (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	330	11.11	51.1	
3	341	7.72	34.4	
4	362	18.85	79.0	
5	400	18.72	71.0	
6	603	859.69	2,160.8	
7	1,144	32.56	43.1	
8	10,380	75.00	10.9	Upper Marker

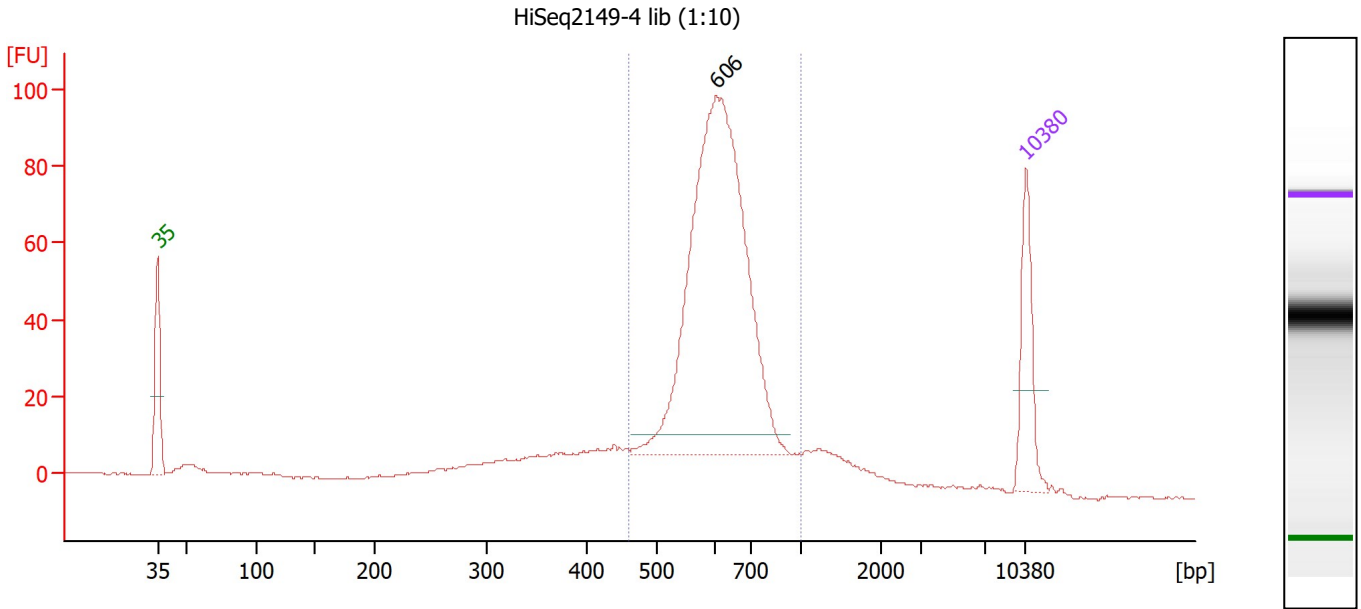
Region table for sample 8 : HiSeq2149-3 lib (1:10)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
451	1,000	783.1	78	623	14.3	916.44	2,274.8	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : HiSeq2149-4 lib (1:10)

Number of peaks found: 1 Corr. Area 1: 652.5
 Noise: 0.2

Peak table for sample 9 : HiSeq2149-4 lib (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	606	700.32	1,750.2	
3	10,380	75.00	10.9	Upper Marker

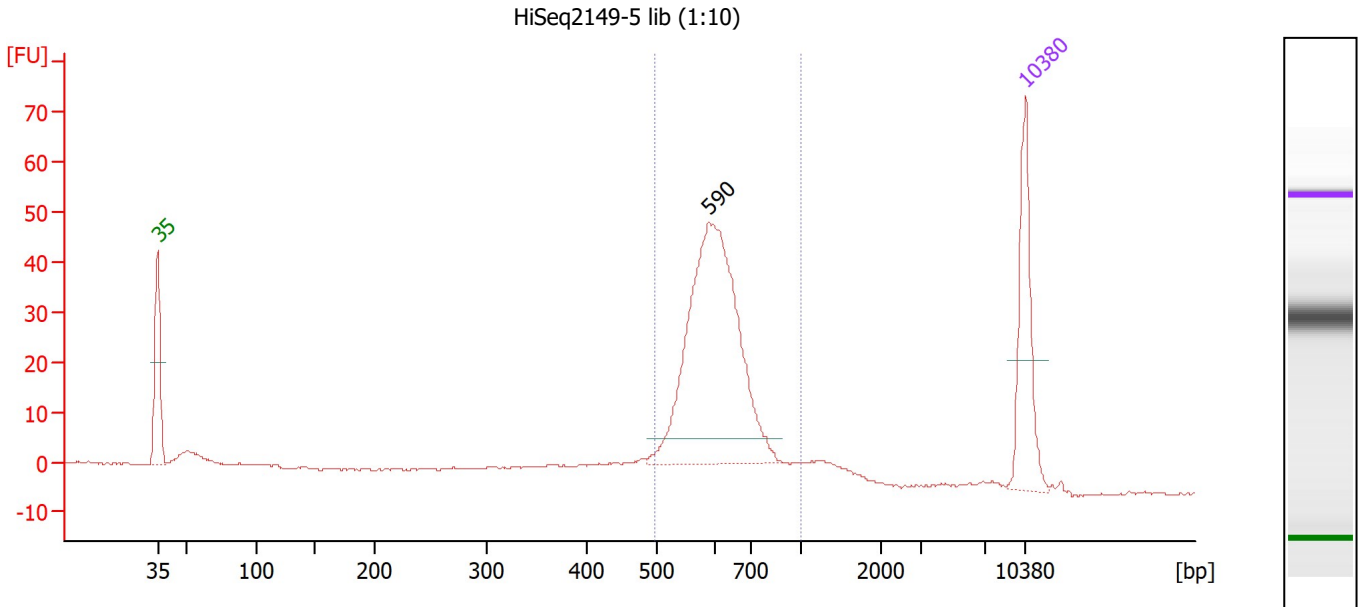
Region table for sample 9 : HiSeq2149-4 lib (1:10)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
459	1,000	652.5	76	626	14.0	878.81	2,170.7	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : HiSeq2149-5 lib (1:10)

Number of peaks found: 1 Corr. Area 1: 290.7
 Noise: 0.2

Peak table for sample 10 : HiSeq2149-5 lib (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	590	340.26	873.6	
3	10,380	75.00	10.9	Upper Marker

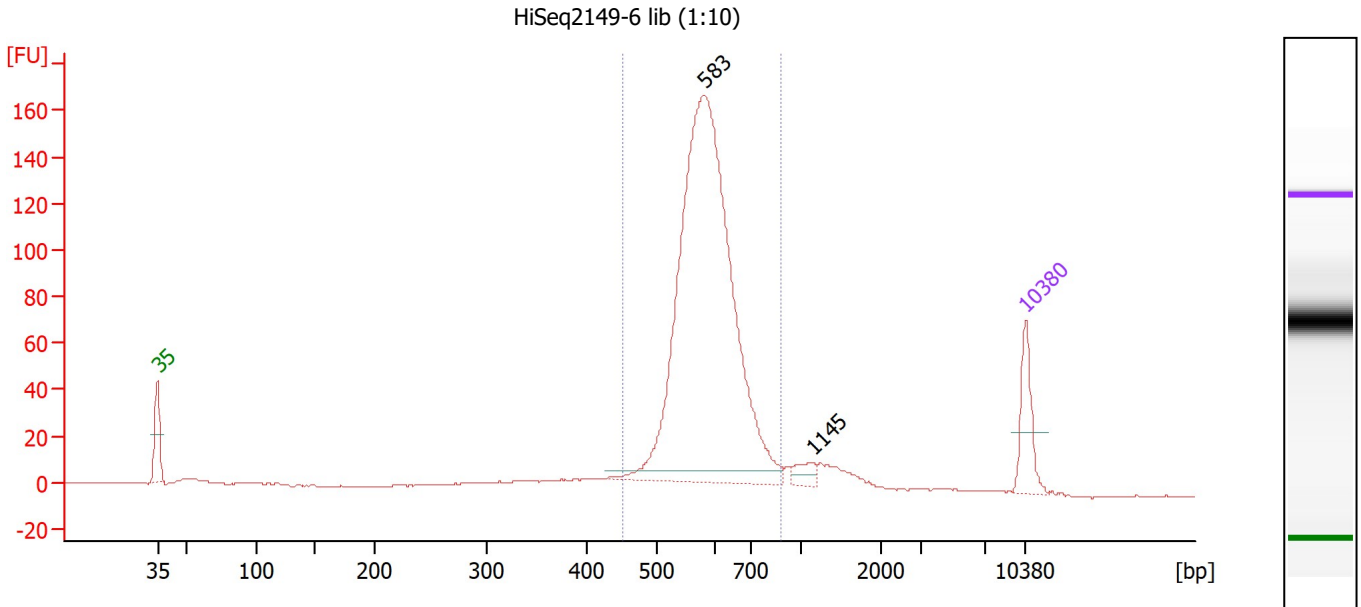
Region table for sample 10 : HiSeq2149-5 lib (1:10)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
496	1,000	290.7	78	620	12.7	396.91	984.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : HiSeq2149-6 lib (1:10)

Number of peaks found: 2 Corr. Area 1: 943.4
 Noise: 0.2

Peak table for sample 11 : HiSeq2149-6 lib (1:10)

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	583	1,382.47	3,590.6	
3	1,145	26.54	35.1	
4	10,380	75.00	10.9	Upper Marker

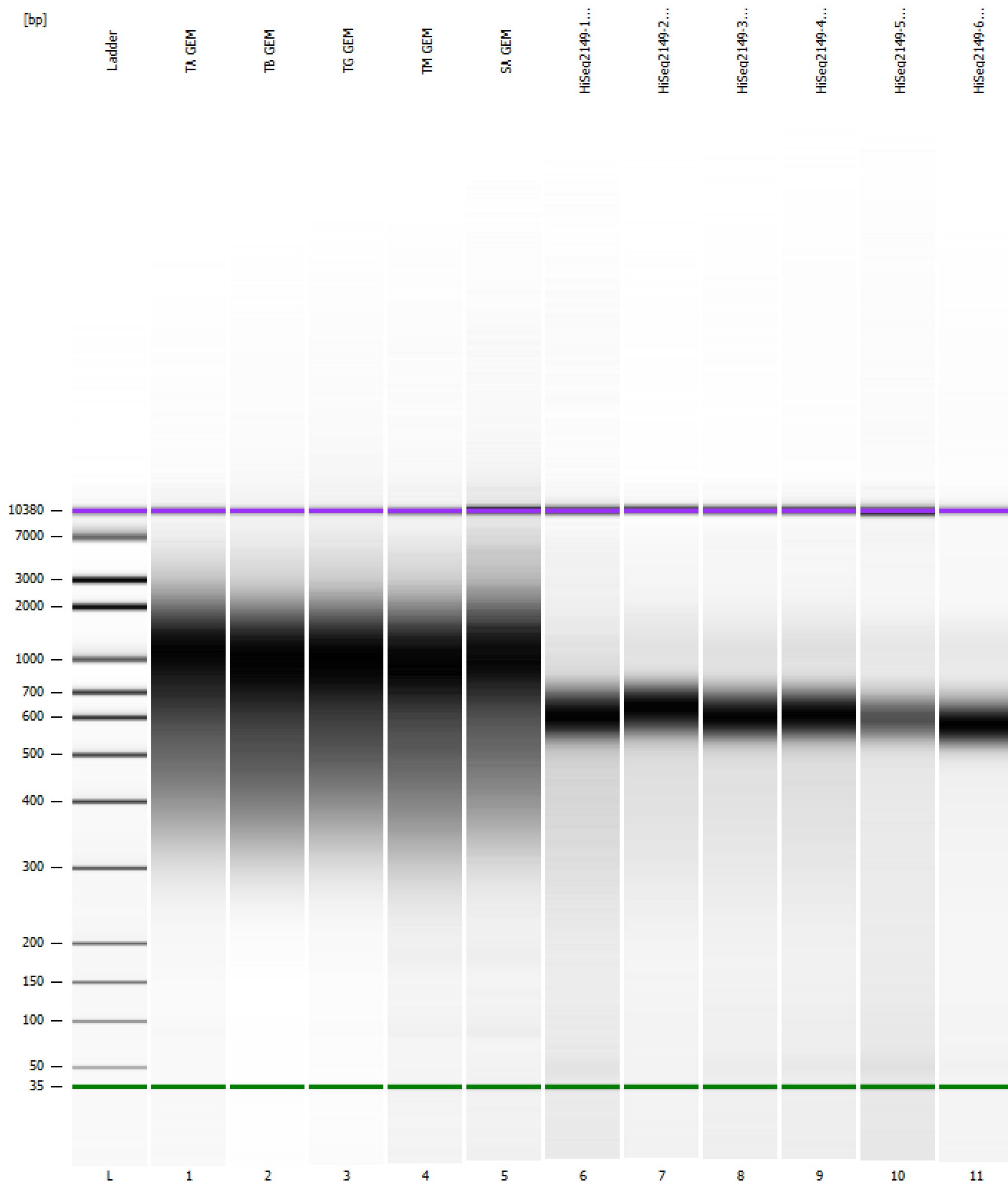
Region table for sample 11 : HiSeq2149-6 lib (1:10)

From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
452	882	943.4	86	595	10.7	1,471.61	3,790.9	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
Modified: 10/20/2020 12:50:26 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: Z:\...\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad

Created: 10/20/2020 11:53:26 AM
 Modified: 10/20/2020 12:50:26 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		10/20/2020 12:34:46 PM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Run started on port 1 (File: Z:\XADs\2020-10-20\Bioanalyzer1_High Sensitivity DNA Assay_2020-10-20_001.xad)		Instrument	Run		10/20/2020 11:53:32 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		10/20/2020 11:53:32 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		10/20/2020 11:53:32 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		10/20/2020 11:53:32 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		10/20/2020 11:53:32 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		10/20/2020 11:53:32 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		10/20/2020 11:53:32 AM	(GMT --07:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB