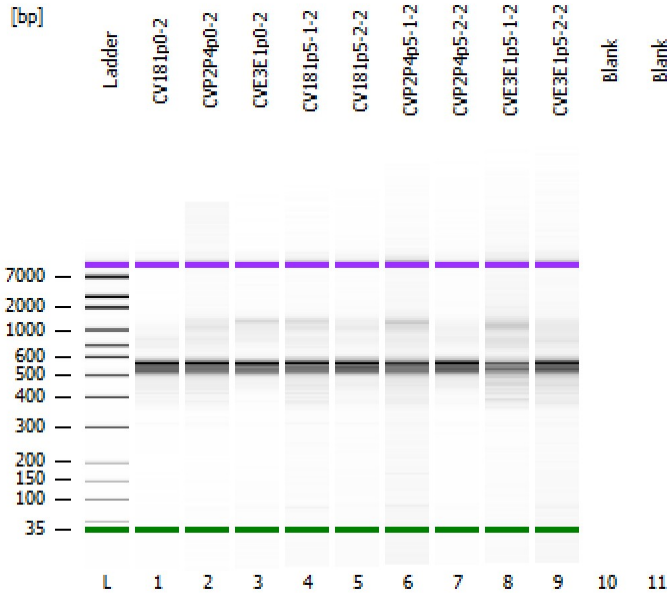


Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
Modified: 12/12/2019 11:21:31 AM

**Electrophoresis File Run Summary**



Instrument Information:

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

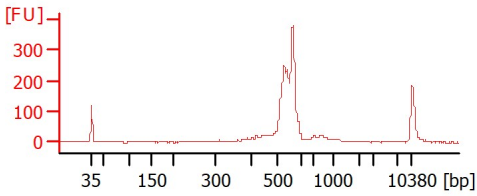
Assay Information:

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

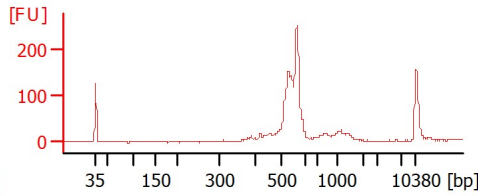
Chip Information:

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

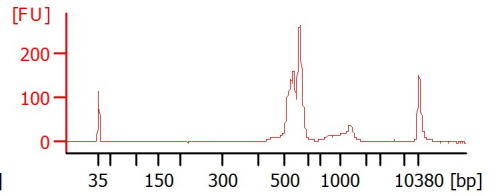
**CV181p0-2**



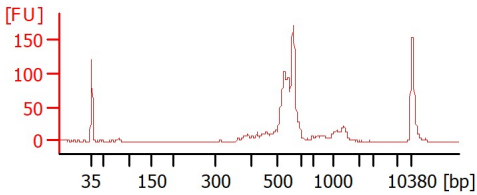
**CVP2P4p0-2**



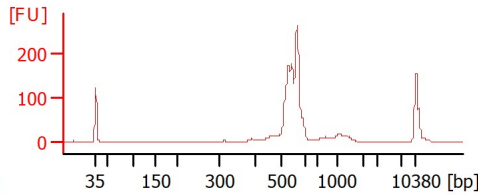
**CVE3E1p0-2**



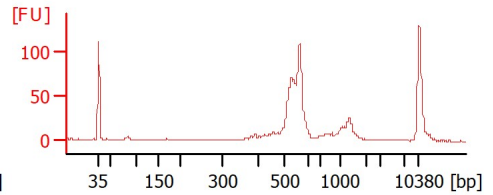
**CV181p5-1-2**



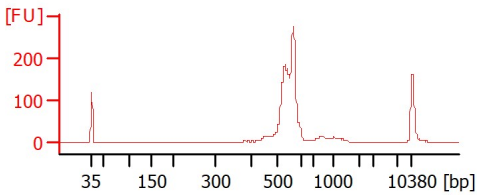
**CV181p5-2-2**



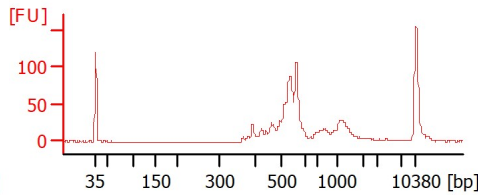
**CVP2P4p5-1-2**



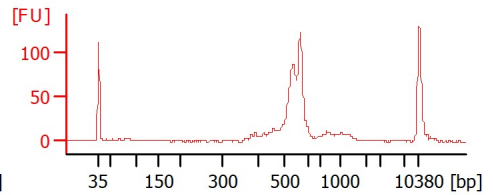
**CVP2P4p5-2-2**



**CVE3E1p5-1-2**



**CVE3E1p5-2-2**



Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electrophoresis File Run Summary (Chip Summary)**

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
CV181p0-2		<input type="checkbox"/>	✓			
CVP2P4p0-2		<input type="checkbox"/>	✓			
CVE3E1p0-2		<input type="checkbox"/>	✓			
CV181p5-1-2		<input type="checkbox"/>	✓			
CV181p5-2-2		<input type="checkbox"/>	✓			
CVP2P4p5-1-2		<input type="checkbox"/>	✓			
CVP2P4p5-2-2		<input type="checkbox"/>	✓			
CVE3E1p5-1-2		<input type="checkbox"/>	✓			
CVE3E1p5-2-2		<input type="checkbox"/>	✓			
Blank		<input type="checkbox"/>				
Blank		<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\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 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

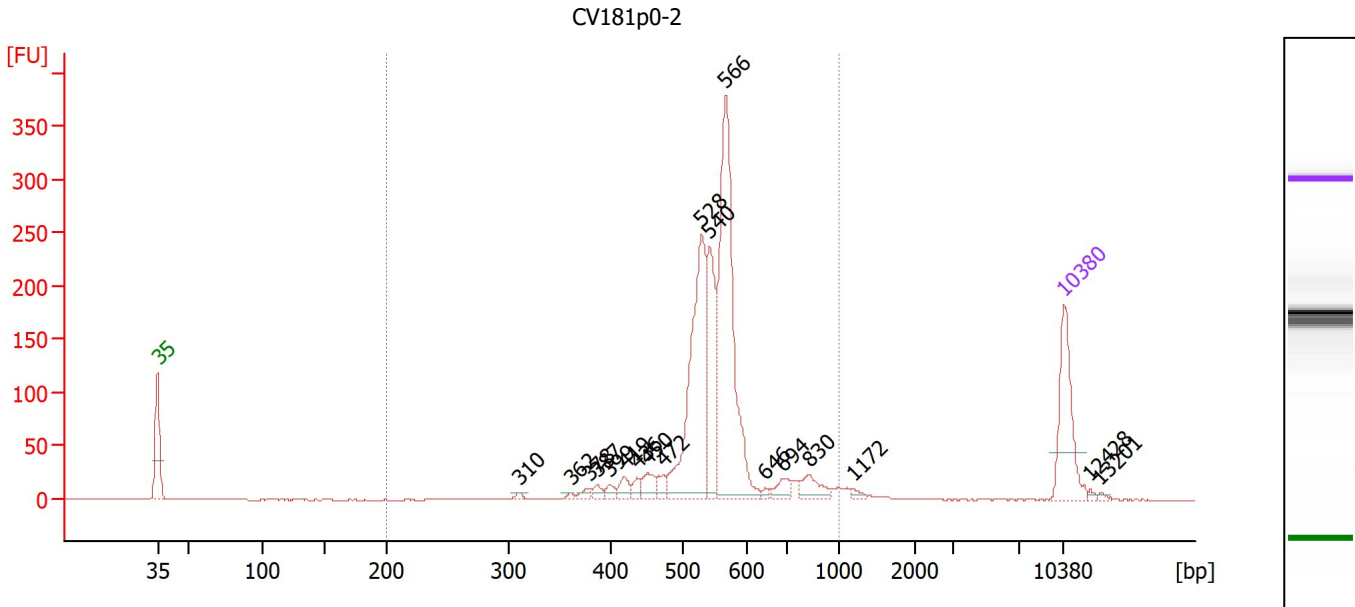
**Ladder**

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\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary**



**Overall Results for sample 1 : CV181p0-2**

Number of peaks found: 18                      Corr. Area 1: 1,488.1  
 Noise: 0.4

**Peak table for sample 1 : CV181p0-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	310	3.44	16.8	
3	362	2.86	12.0	
4	378	7.06	28.3	
5	387	7.80	30.6	
6	399	8.28	31.4	
7	419	13.53	48.9	
8	436	9.65	33.6	
9	450	19.41	65.3	
10	472	11.69	37.5	
11	528	243.35	698.1	
12	540	110.07	308.8	
13	566	315.85	845.8	
14	646	3.84	9.0	
15	694	15.59	34.0	
16	830	23.25	42.5	
17	1,172	5.03	6.5	
18	10,380	75.00	10.9	Upper Marker
19	12,428	0.00	0.0	
20	13,201	0.00	0.0	

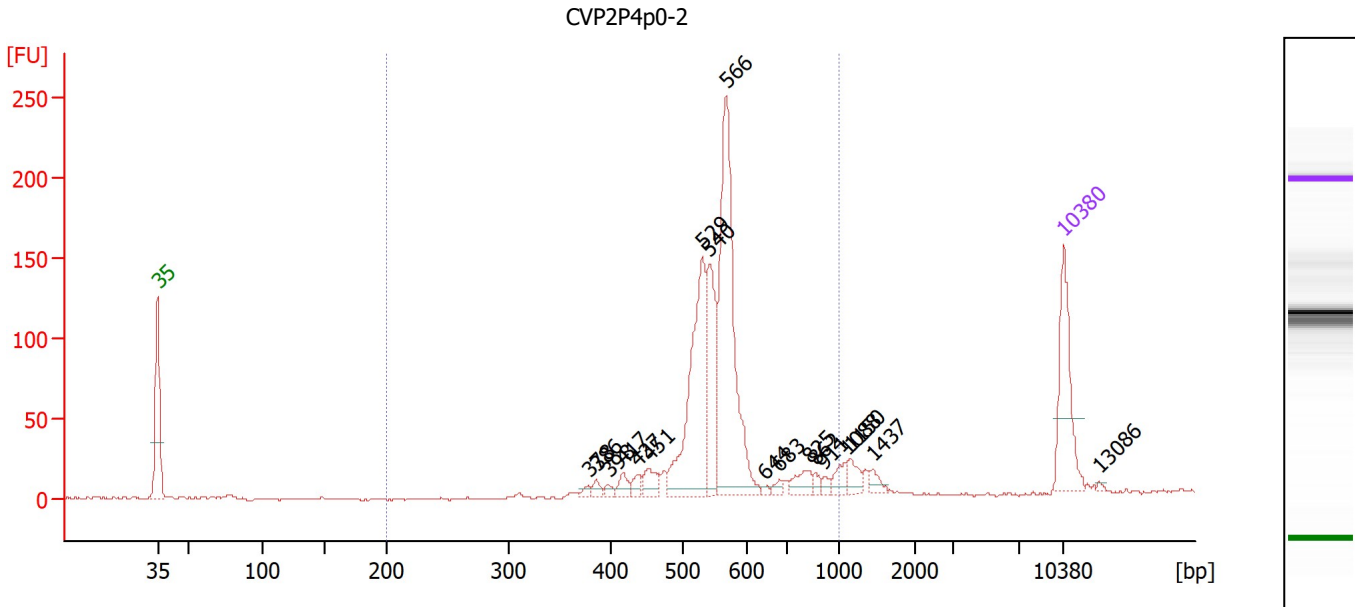
**Region table for sample 1 : CV181p0-2**

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	1,488.1	97	552	15.9	834.59	2,360.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : CVP2P4p0-2**

Number of peaks found: 18                      Corr. Area 1: 889.9  
 Noise: 0.7

**Peak table for sample 2 : CVP2P4p0-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	378	5.62	22.6	
3	386	8.73	34.3	
4	398	6.23	23.7	
5	417	13.23	48.0	
6	437	10.88	37.7	
7	451	20.63	69.3	
8	529	199.56	571.2	
9	540	96.92	271.7	
10	566	281.24	752.4	
11	644	3.24	7.6	
12	683	5.70	12.7	
13	825	18.82	34.6	
14	862	5.70	10.0	
15	911	4.95	8.2	
16	1,088	13.64	19.0	
17	1,150	14.34	18.9	
18	1,437	9.44	10.0	
19	10,380	75.00	10.9	Upper Marker
20	13,086	0.00	0.0	

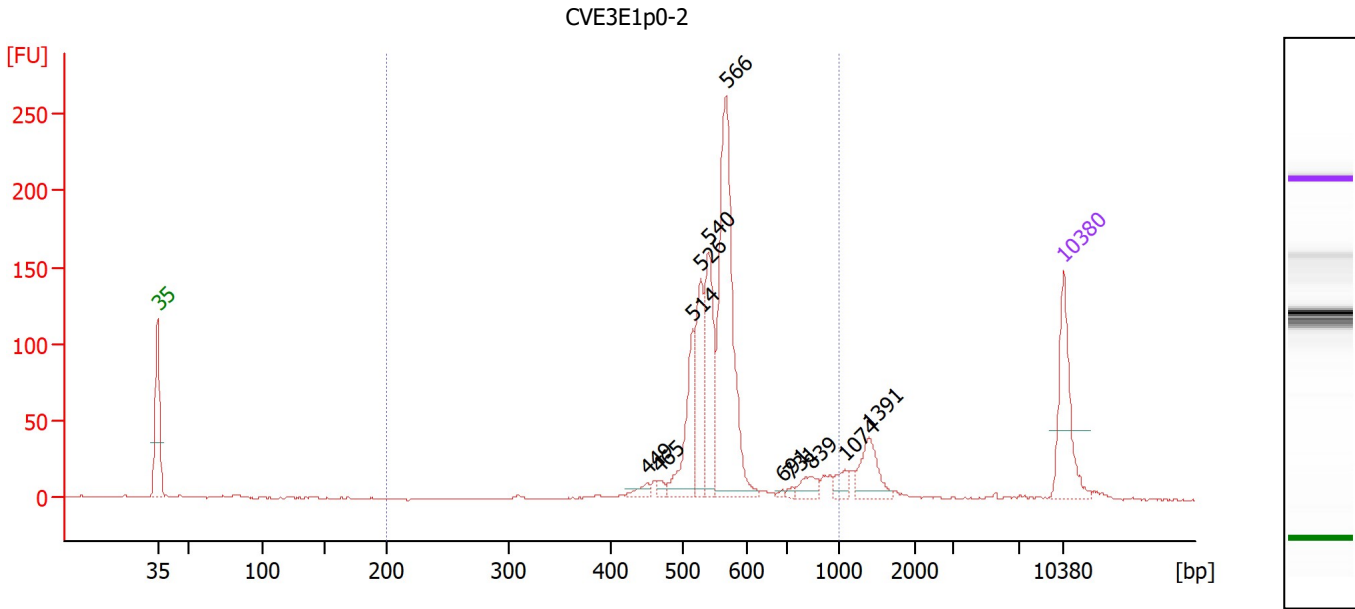
**Region table for sample 2 : CVP2P4p0-2**

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	889.9	92	558	15.8	669.85	1,863.1	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : CVE3E1p0-2**

Number of peaks found: 11      Corr. Area 1: 859.6  
 Noise: 0.5

**Peak table for sample 3 : CVE3E1p0-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	449	10.56	35.6	
3	465	7.11	23.1	
4	514	84.19	248.1	
5	526	90.91	261.7	
6	540	112.09	314.8	
7	566	283.84	760.0	
8	691	2.51	5.5	
9	731	3.71	7.7	
10	839	17.21	31.1	
11	1,074	13.04	18.4	
12	1,391	40.50	44.1	
13	10,380	75.00	10.9	Upper Marker

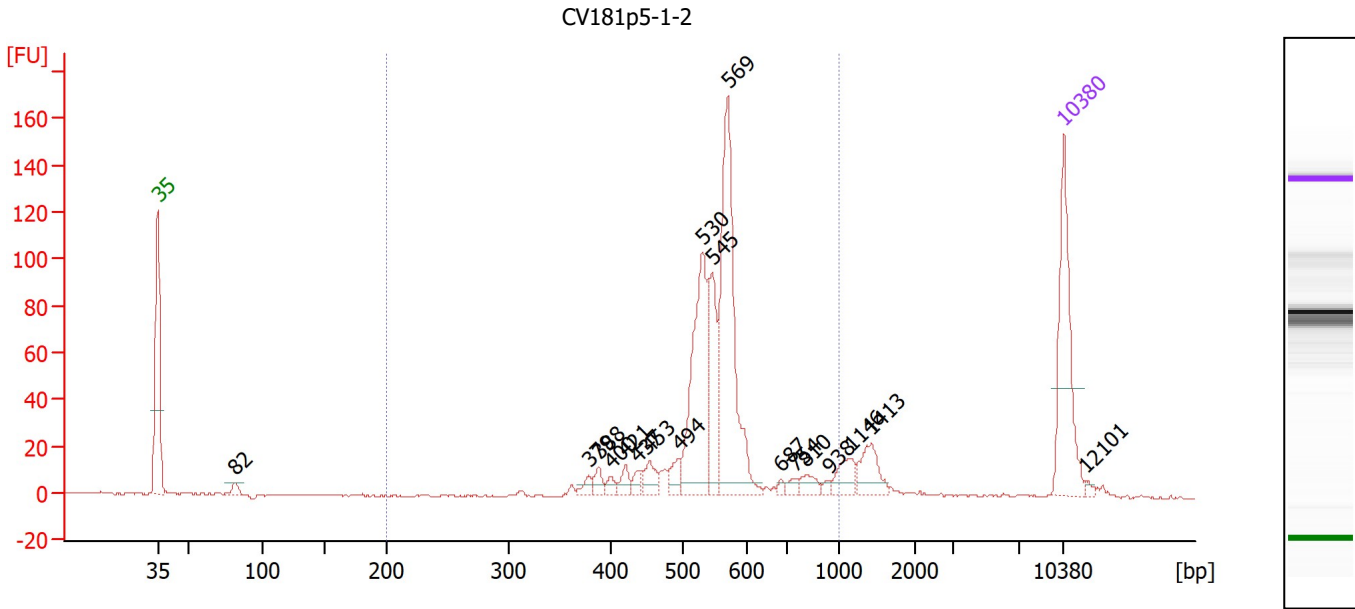
**Region table for sample 3 : CVE3E1p0-2**

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	859.6	88	567	16.2	647.57	1,770.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : CV181p5-1-2**

Number of peaks found: 18                      Corr. Area 1: 629.1  
 Noise: 0.5

**Peak table for sample 4 : CV181p5-1-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	82	7.59	140.7	
3	379	7.52	30.1	
4	388	9.22	36.0	
5	400	6.35	24.0	
6	421	10.23	36.9	
7	437	7.40	25.7	
8	453	16.16	54.1	
9	494	13.78	42.3	
10	530	128.74	368.3	
11	545	61.80	171.8	
12	569	179.24	477.2	
13	687	3.39	7.5	
14	754	5.09	10.2	
15	810	9.87	18.5	
16	938	3.27	5.3	
17	1,146	16.62	22.0	
18	1,413	23.99	25.7	
19	10,380	75.00	10.9	Upper Marker
20	12,101	0.00	0.0	

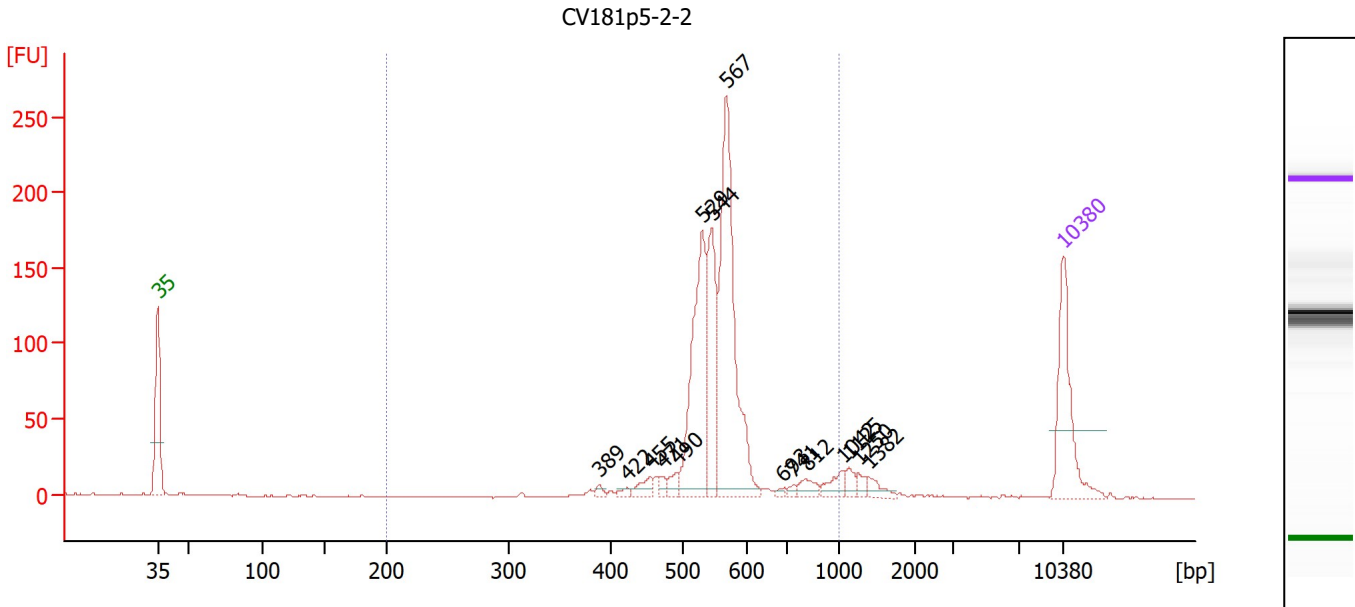
**Region table for sample 4 : CV181p5-1-2**

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	629.1	88	553	16.9	481.08	1,358.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : CV181p5-2-2**

Number of peaks found: 15                      Corr. Area 1: 970.9  
 Noise: 0.5

**Peak table for sample 5 : CV181p5-2-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	389	4.51	17.5	
3	422	4.75	17.1	
4	455	13.71	45.7	
5	471	6.94	22.3	
6	490	9.43	29.1	
7	529	171.71	491.6	
8	544	103.54	288.3	
9	567	250.90	670.7	
10	693	3.27	7.1	
11	741	3.80	7.8	
12	812	12.26	22.9	
13	1,042	14.35	20.9	
14	1,125	8.98	12.1	
15	1,250	6.16	7.5	
16	1,382	9.96	10.9	
17	10,380	75.00	10.9	Upper Marker

**Region table for sample 5 : CV181p5-2-2**

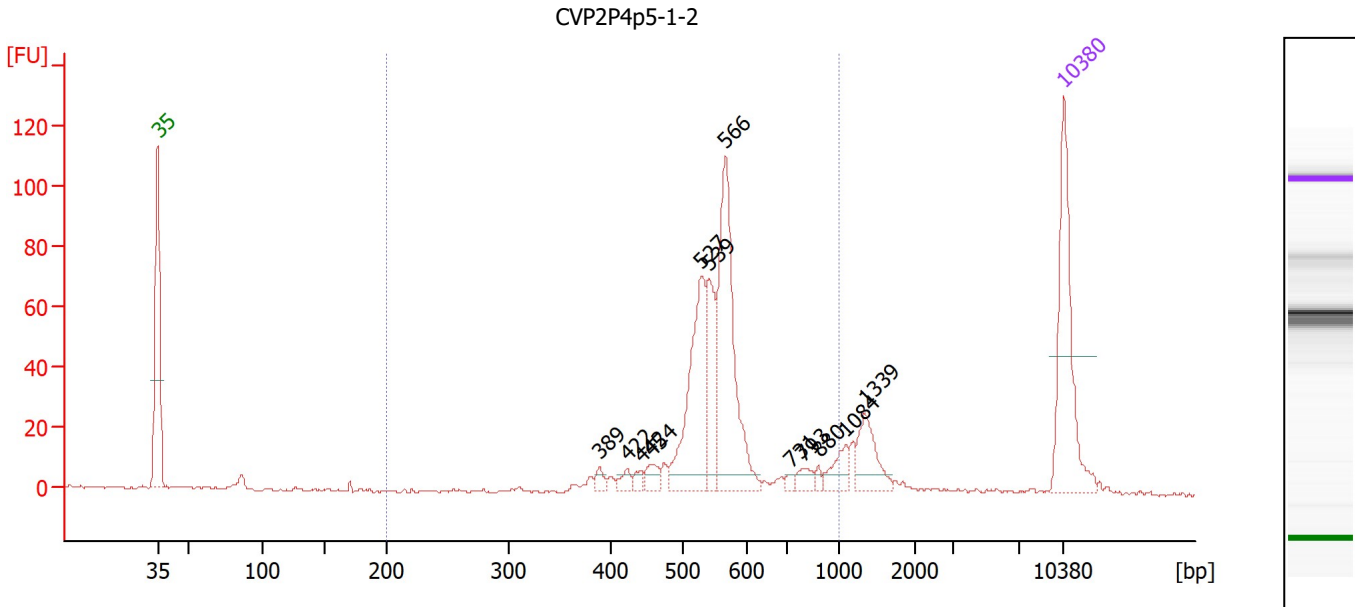
From [bp]	To [bp]	Corr. Area	% of Total	Average Size [bp]	Size distribution in CV [%]	Conc. [pg/μl]	Molarity [pmol/l]	Color
200	1,000	970.9	90	560	15.1	618.88	1,712.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : CVP2P4p5-1-2**

Number of peaks found: 12      Corr. Area 1: 474.6  
 Noise: 0.5

**Peak table for sample 6 : CVP2P4p5-1-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	389	5.72	22.3	
3	422	6.58	23.6	
4	442	5.43	18.6	
5	454	10.36	34.6	
6	527	103.43	297.3	
7	539	48.60	136.6	
8	566	139.58	374.0	
9	731	2.99	6.2	
10	793	8.14	15.6	
11	880	3.32	5.7	
12	1,084	14.93	20.9	
13	1,339	28.26	32.0	
14	10,380	75.00	10.9	Upper Marker

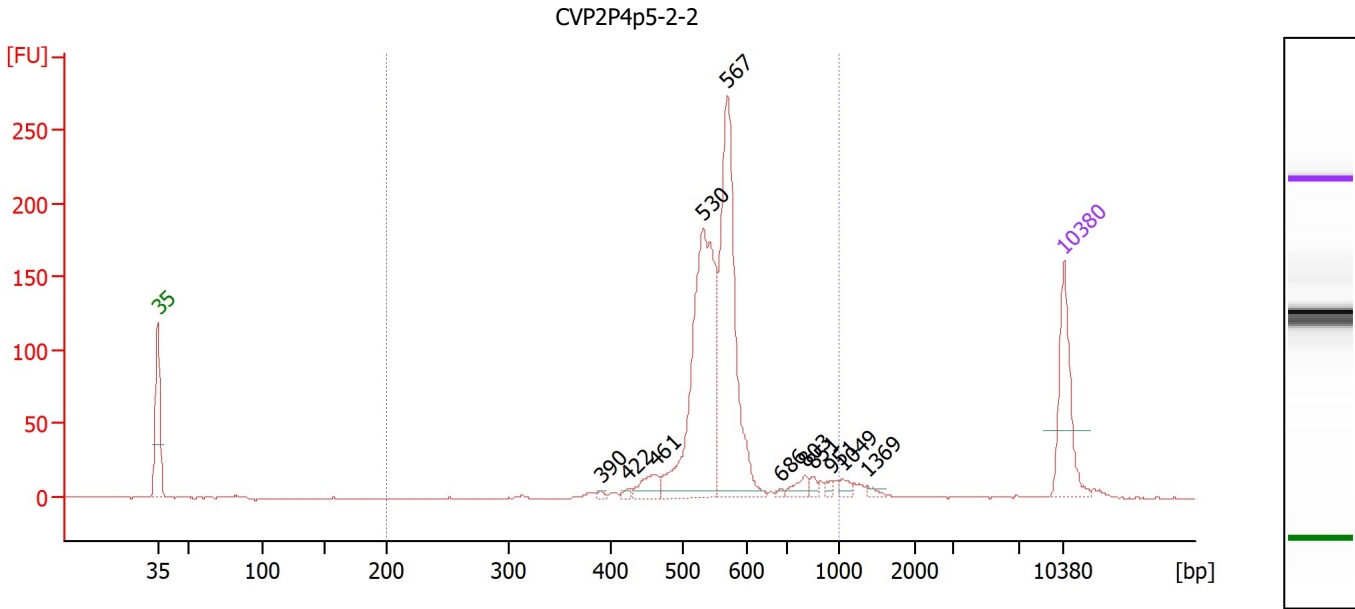
**Region table for sample 6 : CVP2P4p5-1-2**

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	474.6	81	561	18.8	379.22	1,062.8	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : CVP2P4p5-2-2**

Number of peaks found: 11                      Corr. Area 1: 1,026.9  
 Noise: 0.3

**Peak table for sample 7 : CVP2P4p5-2-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	390	3.18	12.3	
3	422	3.94	14.1	
4	461	25.13	82.6	
5	530	336.23	960.9	
6	567	296.21	791.2	
7	686	2.53	5.6	
8	803	14.06	26.5	
9	851	5.98	10.6	
10	951	4.82	7.7	
11	1,049	7.21	10.4	
12	1,369	4.26	4.7	
13	10,380	75.00	10.9	Upper Marker

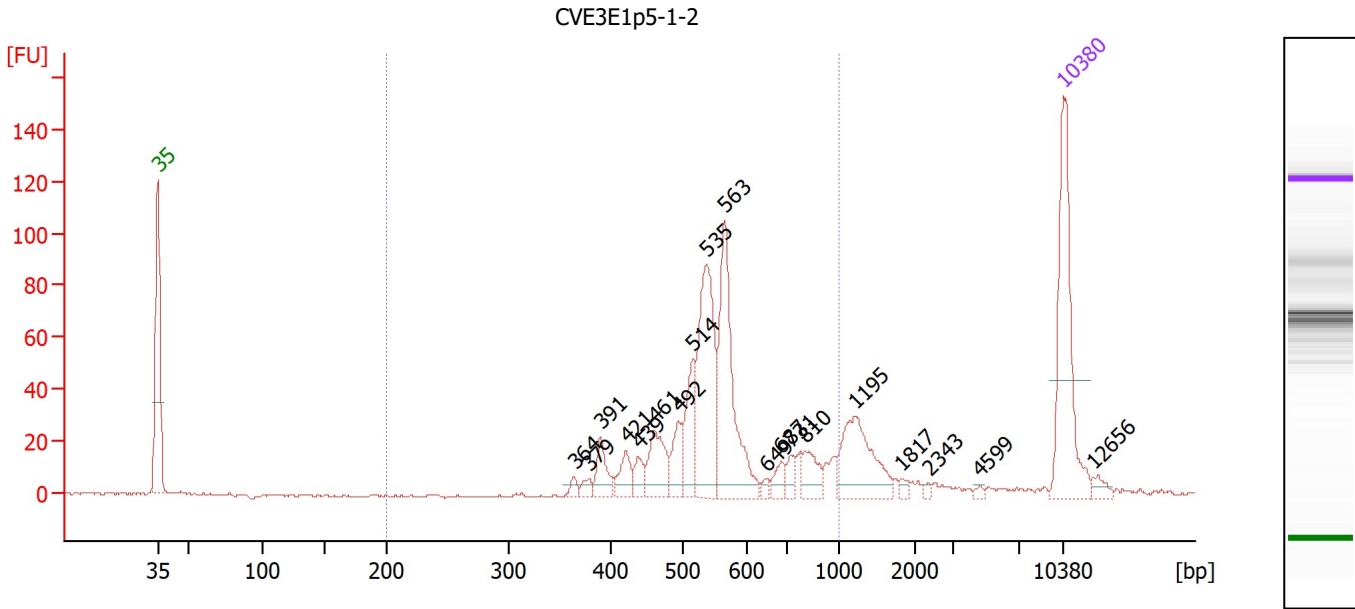
**Region table for sample 7 : CVP2P4p5-2-2**

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	1,026.9	92	561	15.2	723.02	1,996.6	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : CVE3E1p5-1-2**

Number of peaks found: 19                      Corr. Area 1: 581.7  
 Noise: 0.4

**Peak table for sample 8 : CVE3E1p5-1-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	364	5.06	21.1	
3	379	5.80	23.2	
4	391	19.13	74.2	
5	421	16.01	57.6	
6	439	11.06	38.2	
7	461	32.14	105.7	
8	492	19.97	61.5	
9	514	35.94	105.9	
10	535	96.64	273.6	
11	563	100.45	270.2	
12	649	3.35	7.8	
13	687	9.67	21.3	
14	731	8.51	17.6	
15	810	17.02	31.8	
16	1,195	51.91	65.8	
17	1,817	2.99	2.5	
18	2,343	1.85	1.2	
19	4,599	1.82	0.6	
20	10,380	75.00	10.9	Upper Marker
21	12,656	0.00	0.0	

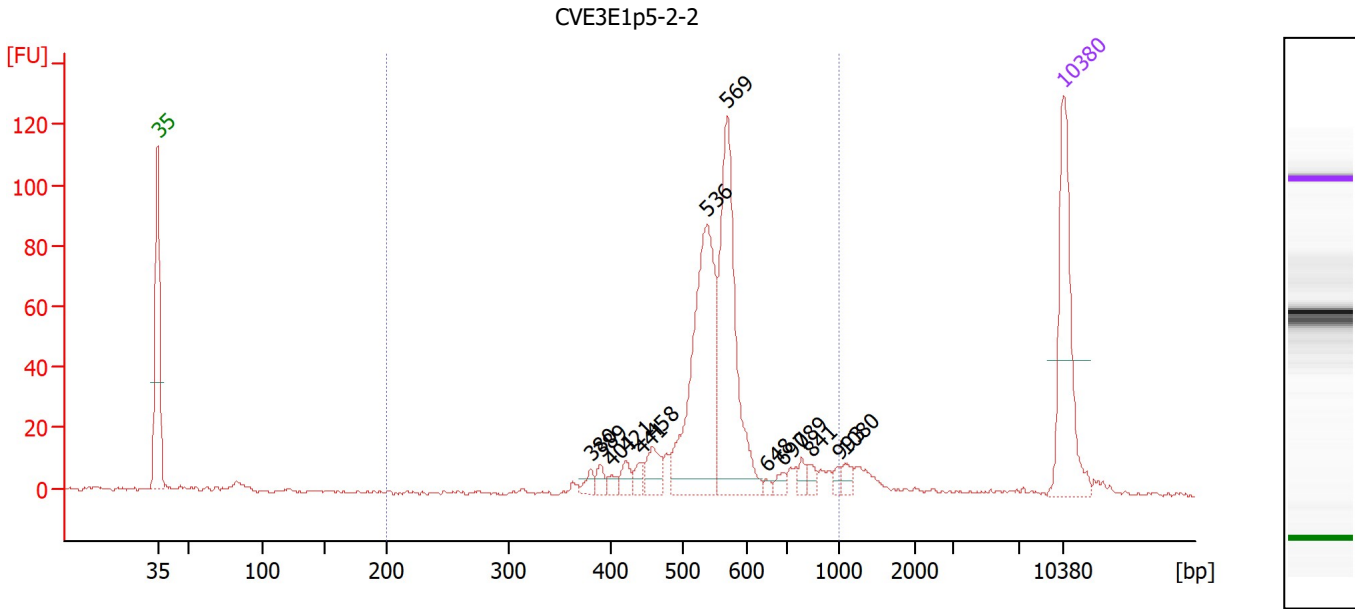
**Region table for sample 8 : CVE3E1p5-1-2**

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	581.7	78	563	22.3	383.90	1,089.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : CVE3E1p5-2-2**

Number of peaks found: 14                      Corr. Area 1: 551.5  
 Noise: 0.5

**Peak table for sample 9 : CVE3E1p5-2-2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	380	6.40	25.5	
3	389	7.59	29.5	
4	401	5.12	19.3	
5	421	9.76	35.1	
6	441	8.08	27.7	
7	458	18.87	62.4	
8	536	170.51	481.9	
9	569	156.37	416.5	
10	648	2.88	6.7	
11	690	5.49	12.0	
12	789	6.20	11.9	
13	841	5.80	10.4	
14	993	4.43	6.8	
15	1,080	6.52	9.1	
16	10,380	75.00	10.9	Upper Marker

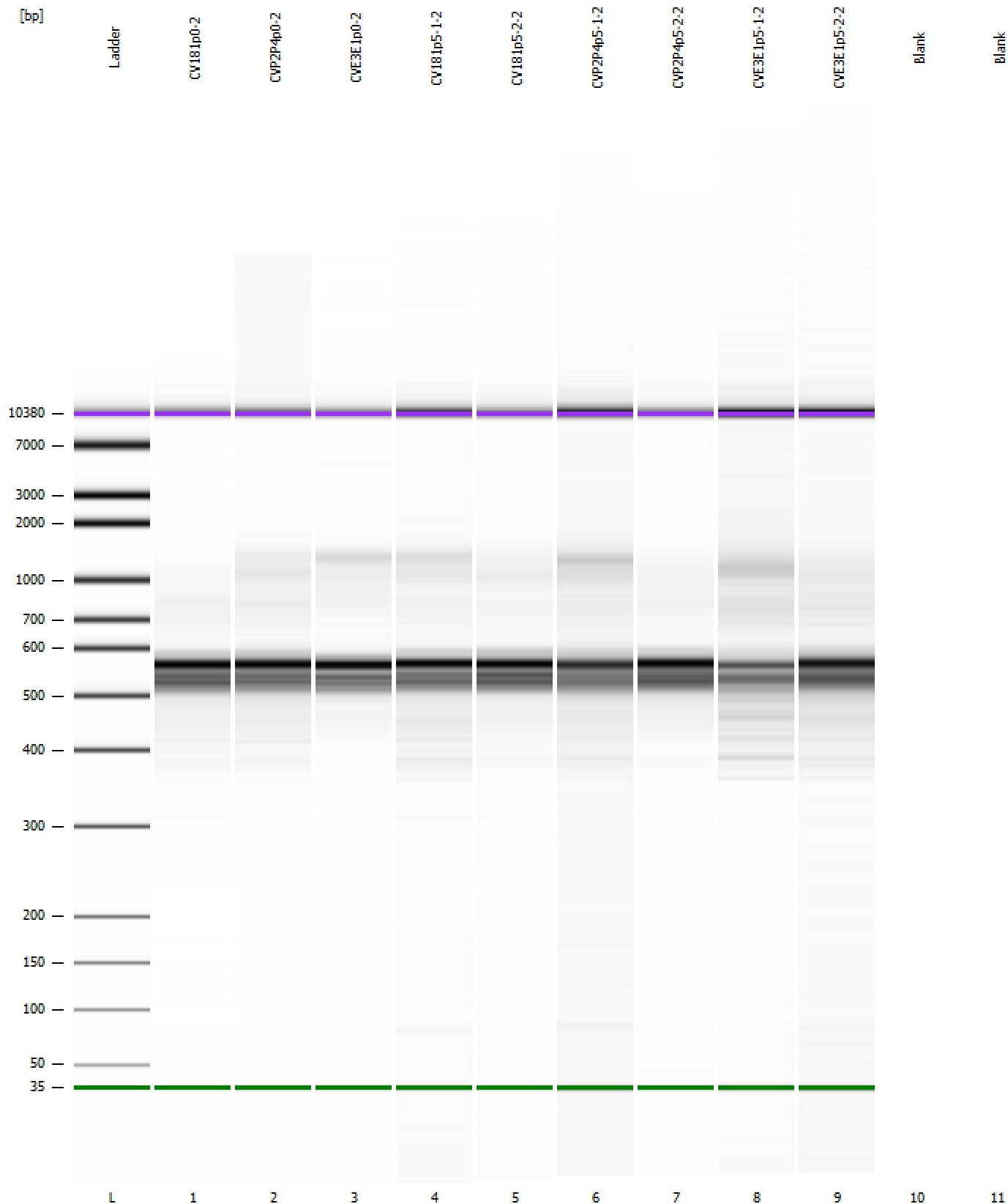
**Region table for sample 9 : CVE3E1p5-2-2**

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	551.5	88	558	18.1	426.50	1,198.1	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
Modified: 12/12/2019 11:21:31 AM

Gel Image

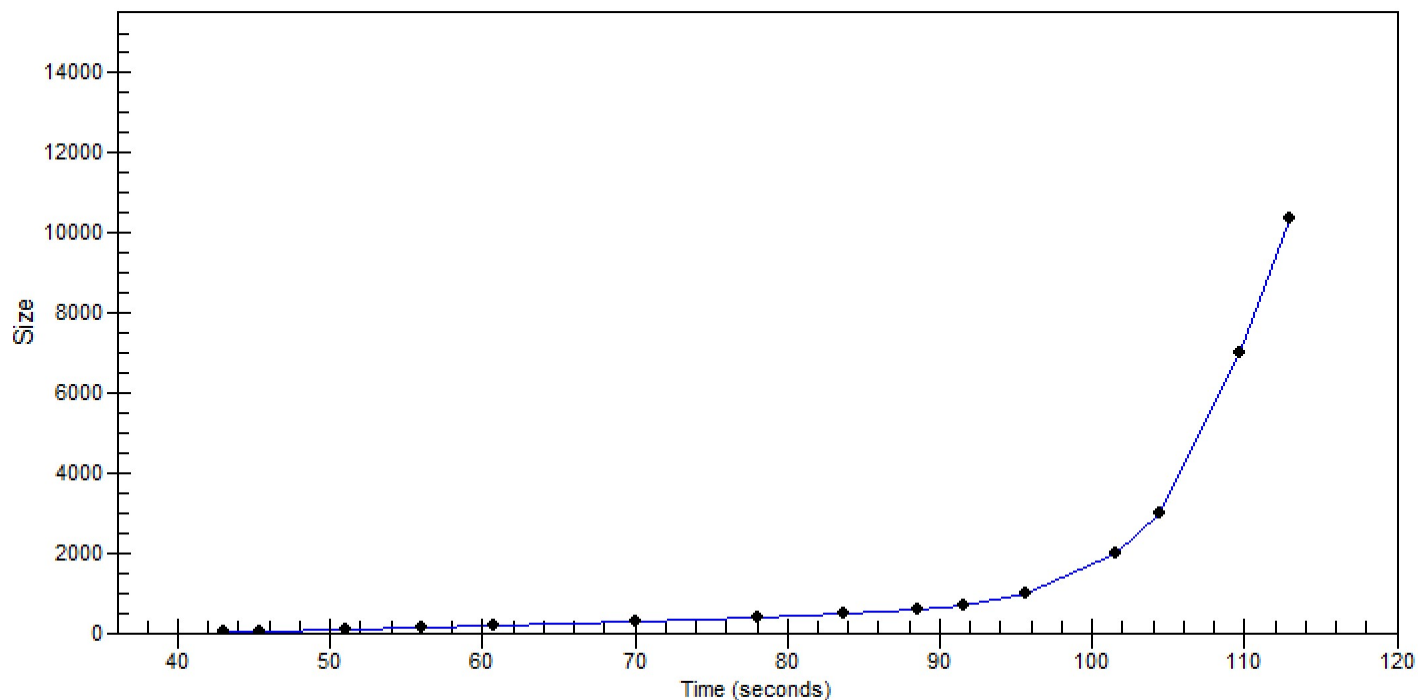


Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
Modified: 12/12/2019 11:21:31 AM

**Curves**

**Standard Curve**



Assay Class: High Sensitivity DNA Assay  
Data Path: Z:\...\Bioanalyzer1\_High Sensitivity DNA Assay\_2019-12-12\_004.xad

Created: 12/12/2019 10:46:30 AM  
Modified: 12/12/2019 11:21:31 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\_004.xad

Created: 12/12/2019 10:46:30 AM  
 Modified: 12/12/2019 11:21:31 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 11:21:23 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_004.xad)		Instrument	Run		12/12/2019 10:46:35 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Product Number : G2938C		Instrument	Run		12/12/2019 10:46:35 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Name :		Instrument	Run		12/12/2019 10:46:35 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Vendor : Agilent Technologies		Instrument	Run		12/12/2019 10:46:35 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Serial# : DE34903152		Instrument	Run		12/12/2019 10:46:35 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Firmware : C.01.069		Instrument	Run		12/12/2019 10:46:35 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB
Cartridge : Electrode		Instrument	Run		12/12/2019 10:46:35 AM	(GMT --08:00) Pacific Standard Time	sbsuser	DESKTOP-4UNV VOB