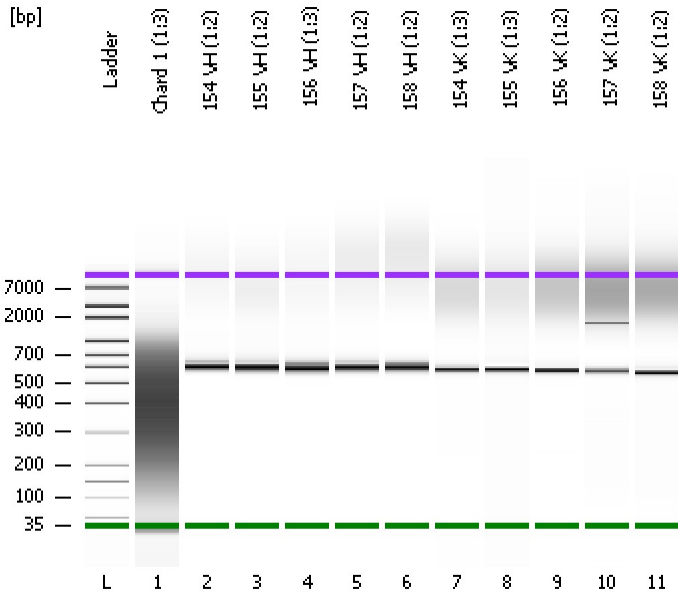


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
Modified: 7/3/2014 8:05:12 AM

**Electrophoresis File Run Summary**



Instrument Information:

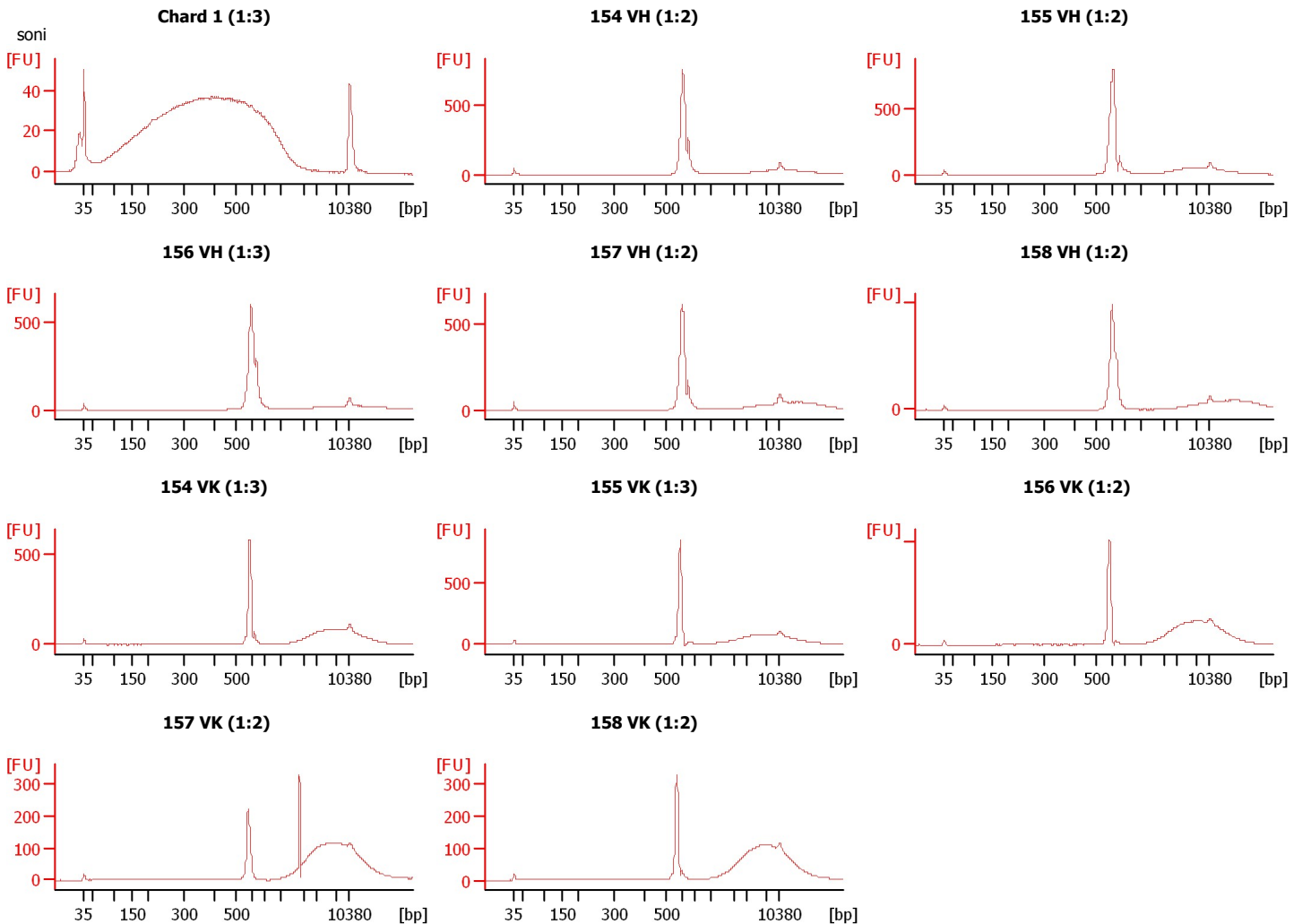
Instrument Name: DE13701086      Firmware: C.01.069  
Serial#: DE13701086      Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
Modified: 7/3/2014 8:05:12 AM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Chard 1 (1:3)	soni	<input type="checkbox"/>	✓			
154 VH (1:2)		<input type="checkbox"/>	✓			
155 VH (1:2)		<input type="checkbox"/>	✓			
156 VH (1:3)		<input type="checkbox"/>	✓			
157 VH (1:2)		<input type="checkbox"/>	✓			
158 VH (1:2)		<input type="checkbox"/>	✓			
154 VK (1:3)		<input type="checkbox"/>	✓			
155 VK (1:3)		<input type="checkbox"/>	✓			
156 VK (1:2)		<input type="checkbox"/>	✓			
157 VK (1:2)		<input type="checkbox"/>	✓			
158 VK (1:2)		<input type="checkbox"/>	✓			
Ladder		<input type="checkbox"/>	✓			

Chip Lot #

Reagent Kit Lot #

Chip Comments :

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
Modified: 7/3/2014 8:05:12 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

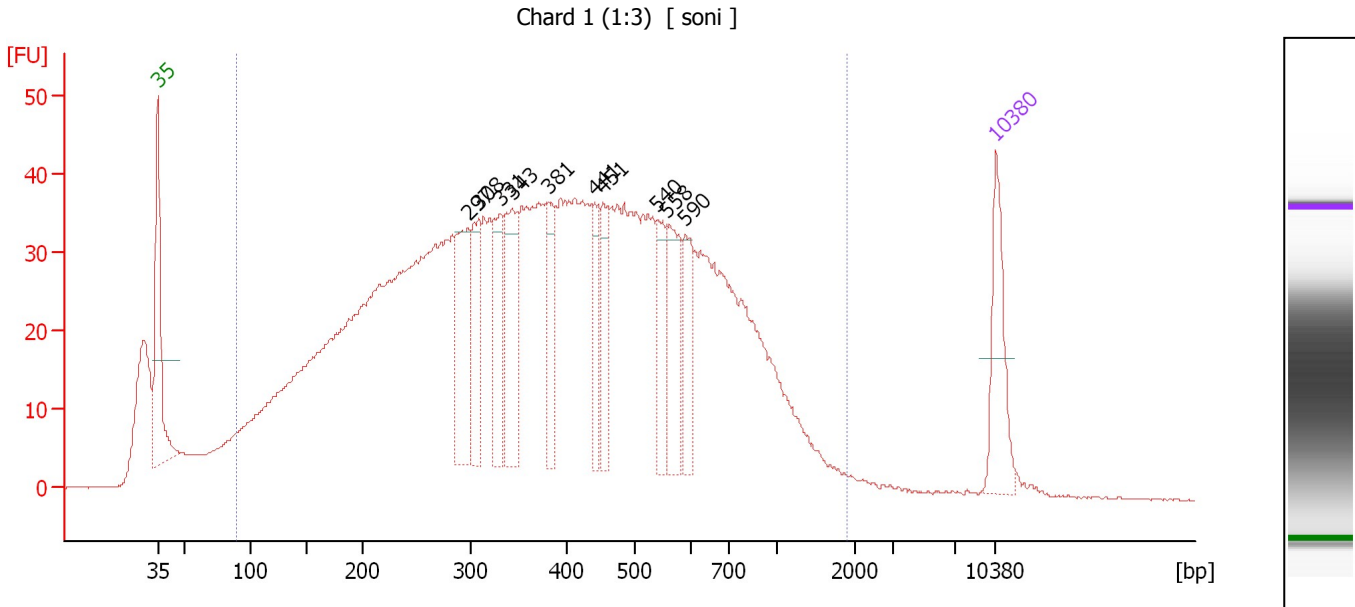
**Ladder**

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:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary**



**Setpoint Deviations for sample 1 : Chard 1 (1:3)**

Height Threshold [FU] : 30

**Overall Results for sample 1 : Chard 1 (1:3)**

Number of peaks found: 10                      Corr. Area 1: 1,814.6  
 Noise: 0.1

**Peak table for sample 1 : Chard 1 (1:3)**

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	297	148.99	759.0	
3	308	94.66	465.4	
4	331	97.86	448.0	
5	343	129.77	573.8	
6	381	77.14	307.0	
7	441	62.25	214.1	
8	451	71.15	238.8	
9	540	69.31	194.6	
10	558	99.57	270.4	
11	590	70.83	181.9	
12	10,380	75.00	10.9	Upper Marker

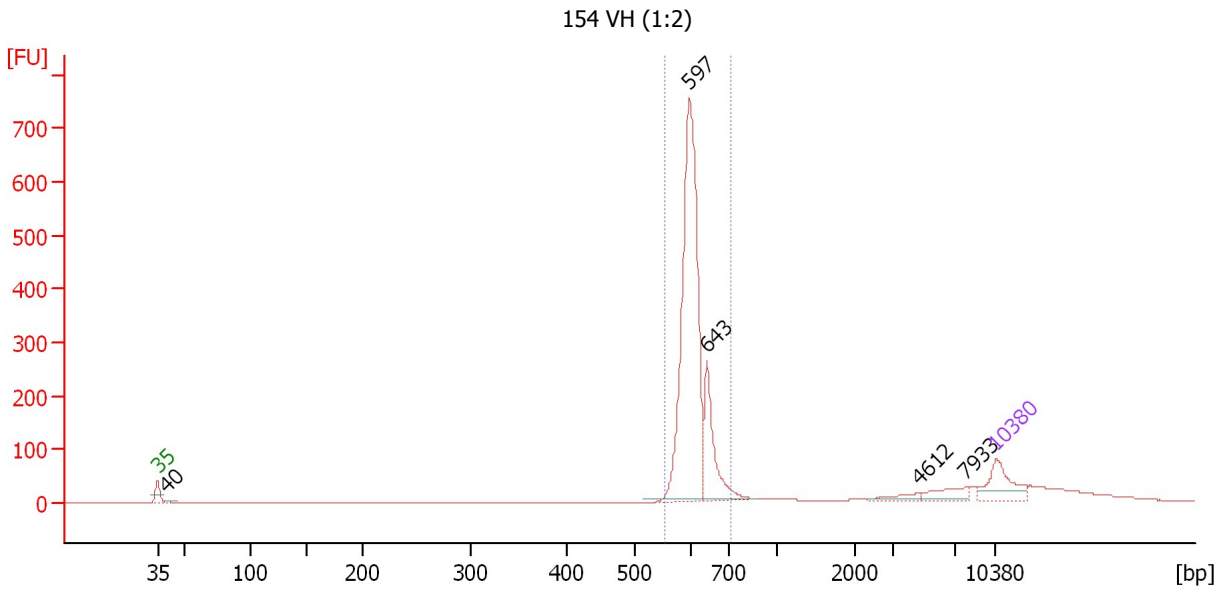
**Region table for sample 1 : Chard 1 (1:3)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
89	1,900	433	25,231.1	4,641.81	1,814.6	93	58.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : 154 VH (1:2)**

Number of peaks found: 5                      Corr. Area 1: 1,556.0  
 Noise: 0.1

**Peak table for sample 2 : 154 VH (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	40	7.65	292.4	
3	597	768.43	1,949.9	
4	643	169.18	399.0	
5	4,612	18.14	6.0	
6	7,933	37.35	7.1	
7	10,380	75.00	10.9	Upper Marker

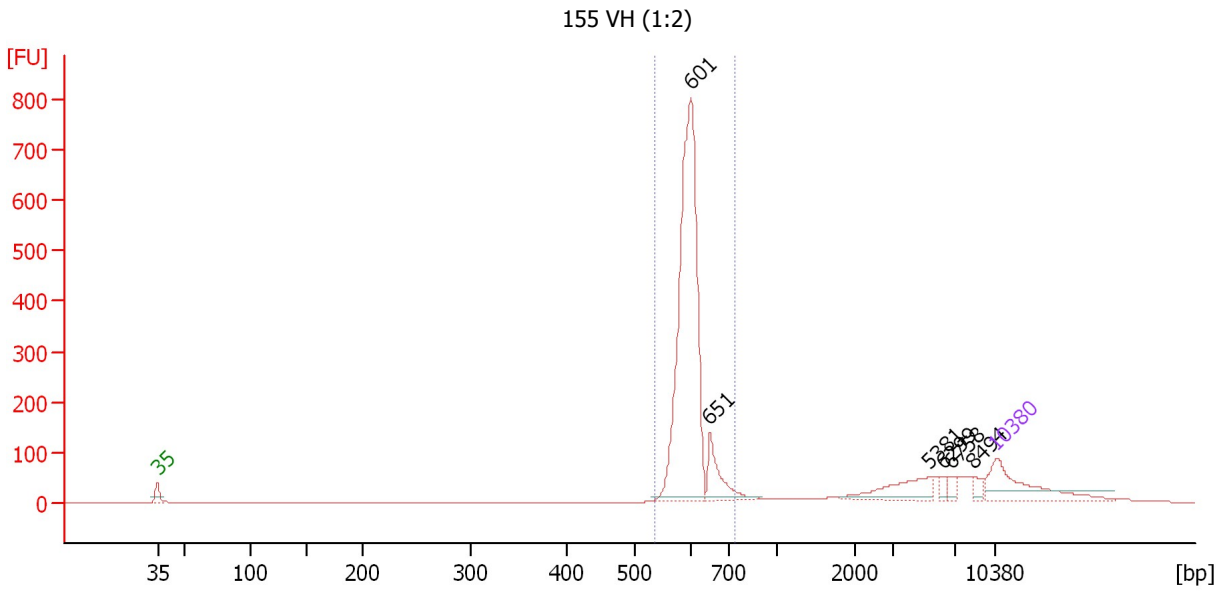
**Region table for sample 2 : 154 VH (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
552	712	609	2,346.3	941.83	1,556.0	79	4.4

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : 155 VH (1:2)**

Number of peaks found: 6                      Corr. Area 1: 1,767.5  
 Noise: 0.2

**Peak table for sample 3 : 155 VH (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	601	553.42	1,394.4	
3	651	58.14	135.4	
4	5,381	52.05	14.7	
5	6,299	8.09	1.9	
6	6,758	9.37	2.1	
7	8,494	11.25	2.0	
8	10,380	75.00	10.9	Upper Marker

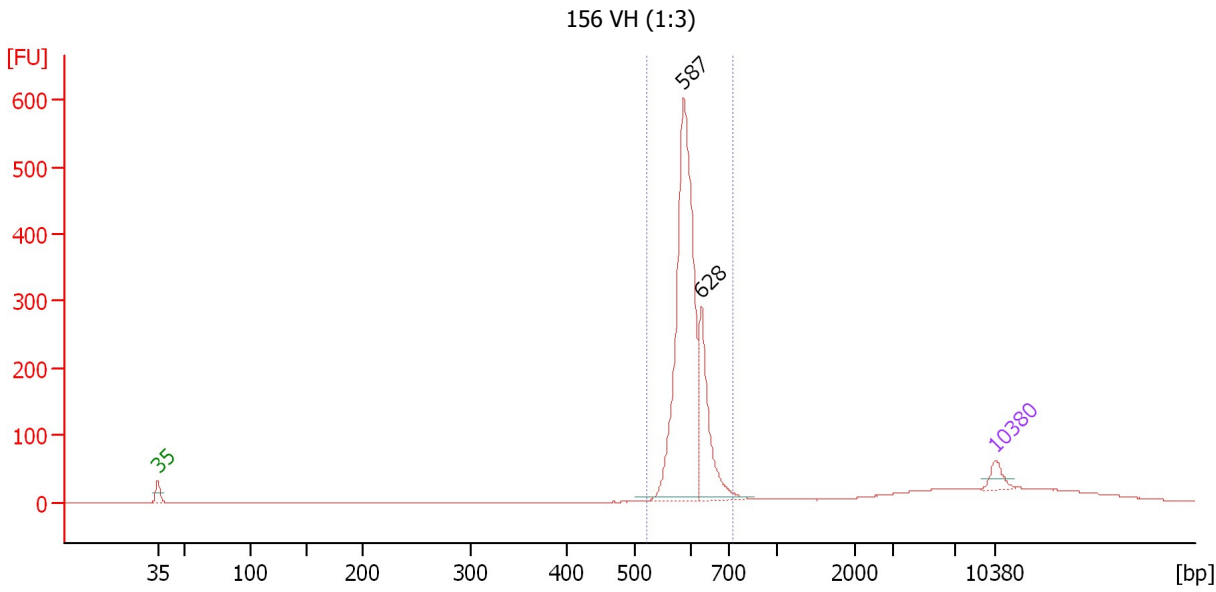
**Region table for sample 3 : 155 VH (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
534	740	602	1,581.6	627.40	1,767.5	76	4.7

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

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 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : 156 VH (1:3)**

Number of peaks found: 2                      Corr. Area 1: 1,456.8  
 Noise: 0.2

**Peak table for sample 4 : 156 VH (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	587	2,287.36	5,901.1	
3	628	644.36	1,553.6	
4	10,380	75.00	10.9	Upper Marker

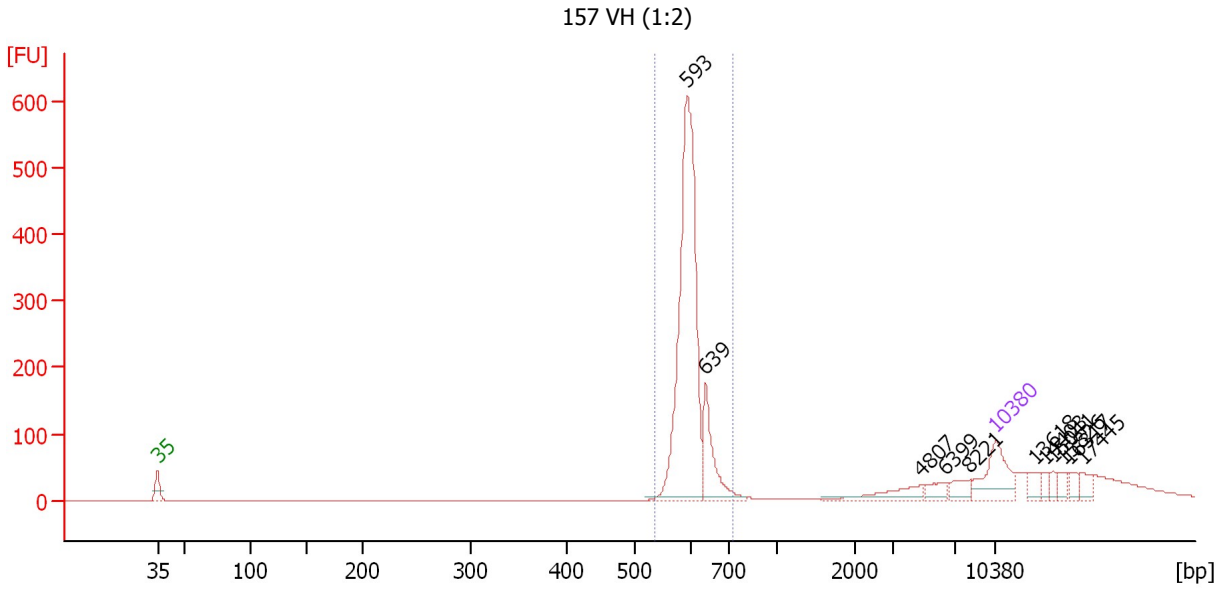
**Region table for sample 4 : 156 VH (1:3)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
520	726	601	7,492.7	2,964.00	1,456.8	79	4.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : 157 VH (1:2)**

Number of peaks found: 11                      Corr. Area 1: 1,275.6  
 Noise: 0.2

**Peak table for sample 5 : 157 VH (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	593	637.87	1,630.2	
3	639	114.01	270.2	
4	4,807	38.98	12.3	
5	6,399	21.17	5.0	
6	8,221	23.20	4.3	
7	10,380	75.00	10.9	Upper Marker
8	13,618	0.00	0.0	
9	14,403	0.00	0.0	
10	15,041	0.00	0.0	
11	15,826	0.00	0.0	
12	16,317	0.00	0.0	
13	17,445	0.00	0.0	

**Region table for sample 5 : 157 VH (1:2)**

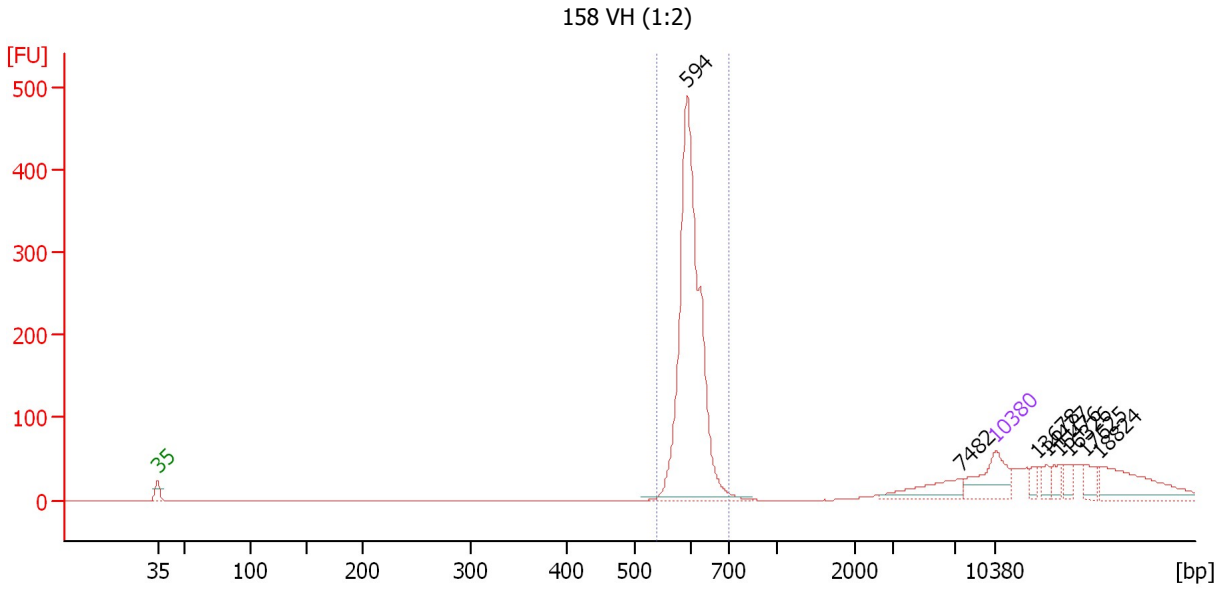
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
536	723	603	1,883.8	748.04	1,275.6	68	4.4



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : 158 VH (1:2)**

Number of peaks found: 8                      Corr. Area 1: 1,052.4  
 Noise: 0.2

**Peak table for sample 6 : 158 VH (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	594	795.31	2,029.6	
3	7,482	58.62	11.9	
4	10,380	75.00	10.9	Upper Marker
5	13,678	0.00	0.0	
6	14,477	0.00	0.0	
7	15,476	0.00	0.0	
8	16,326	0.00	0.0	
9	17,625	0.00	0.0	
10	18,824	0.00	0.0	

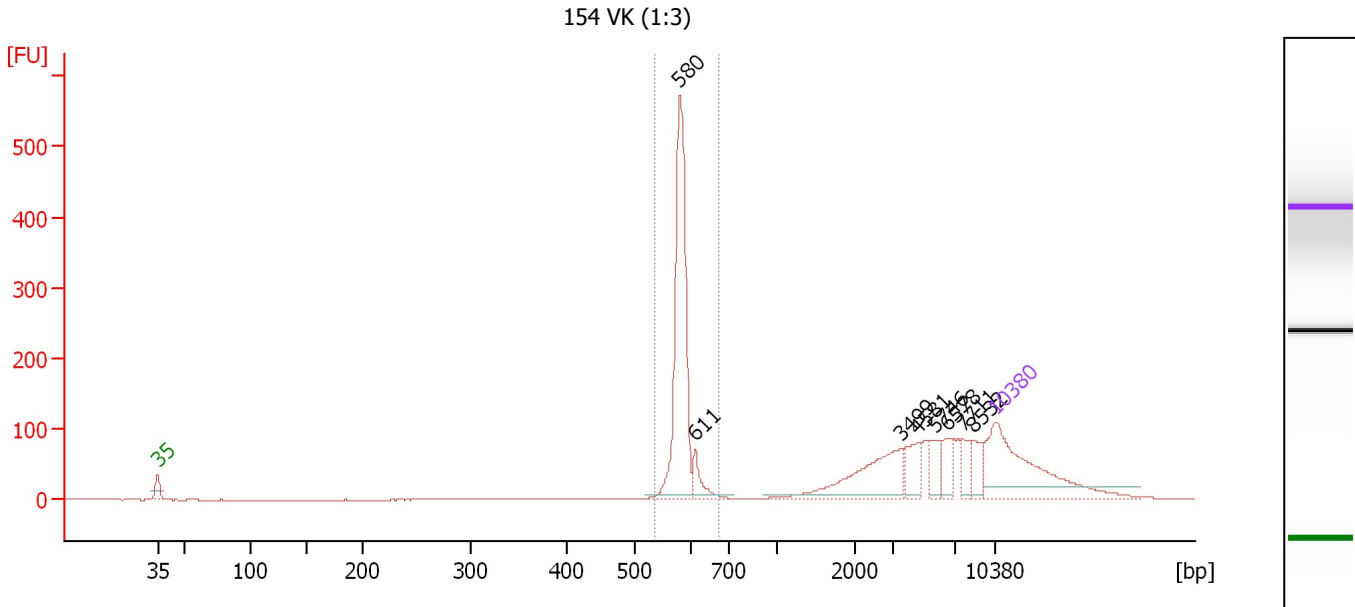
**Region table for sample 6 : 158 VH (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
539	699	604	1,987.1	790.76	1,052.4	64	4.1

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : 154 VK (1:3)**

Number of peaks found: 8                      Corr. Area 1: 734.8  
 Noise: 0.2

**Peak table for sample 7 : 154 VK (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	580	149.81	391.6	
3	611	13.96	34.6	
4	3,499	54.79	23.7	
5	4,581	17.02	5.6	
6	5,746	14.65	3.9	
7	6,578	14.90	3.4	
8	7,711	9.35	1.8	
9	8,532	12.99	2.3	
10	10,380	75.00	10.9	Upper Marker

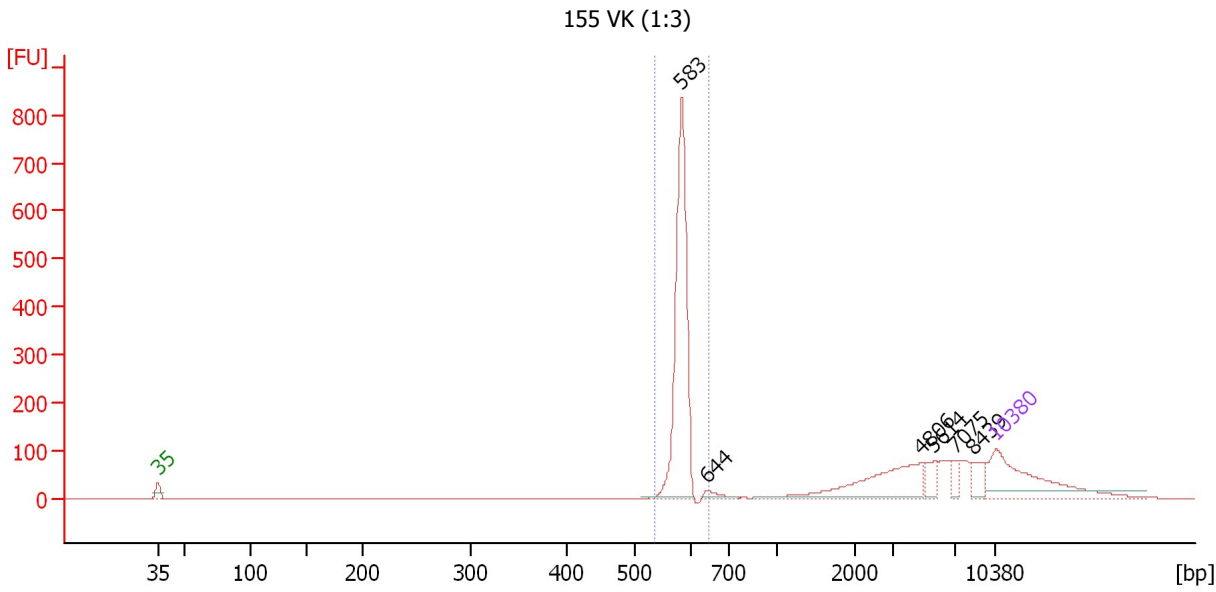
**Region table for sample 7 : 154 VK (1:3)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
533	675	585	428.7	165.34	734.8	45	2.9

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : 155 VK (1:3)**

Number of peaks found: 6                      Corr. Area 1: 976.0  
 Noise: 0.2

**Peak table for sample 8 : 155 VK (1:3)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	583	227.24	590.3	
3	644	7.45	17.5	
4	4,806	74.83	23.6	
5	5,614	15.22	4.1	
6	7,075	9.68	2.1	
7	8,439	15.75	2.8	
8	10,380	75.00	10.9	Upper Marker

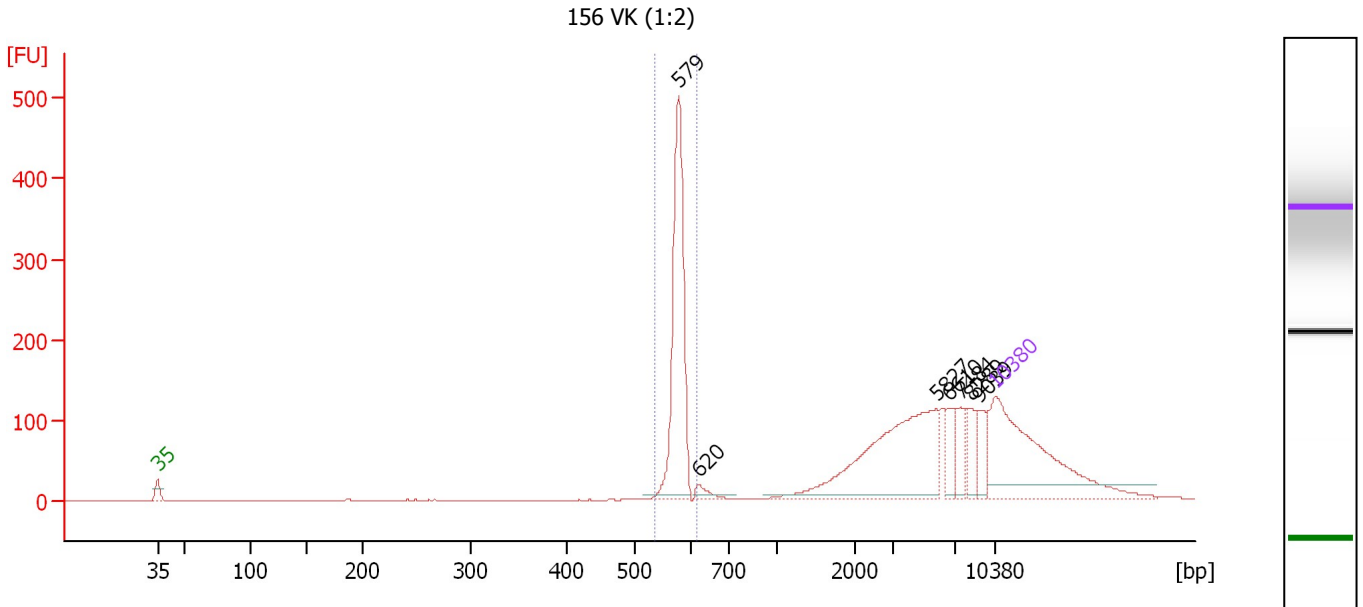
**Region table for sample 8 : 155 VK (1:3)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
534	648	582	599.0	230.16	976.0	53	2.0

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

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 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : 156 VK (1:2)**

Number of peaks found: 7                      Corr. Area 1: 608.1  
 Noise: 0.2

**Peak table for sample 9 : 156 VK (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	579	105.26	275.4	
3	620	4.42	10.8	
4	5,827	93.62	24.3	
5	6,610	11.05	2.5	
6	7,484	11.71	2.4	
7	8,289	10.56	1.9	
8	9,039	10.88	1.8	
9	10,380	75.00	10.9	Upper Marker

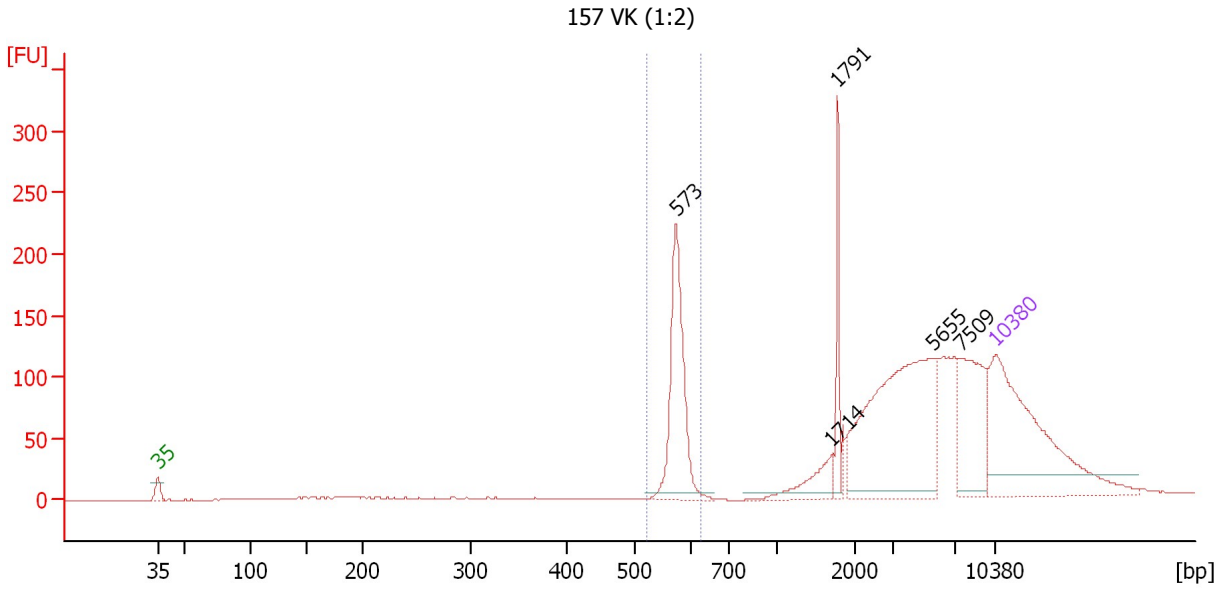
**Region table for sample 9 : 156 VK (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
535	618	577	279.9	106.58	608.1	35	1.8

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : 157 VK (1:2)**

Number of peaks found: 5                      Corr. Area 1: 308.2  
 Noise: 0.3

**Peak table for sample 10 : 157 VK (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	573	61.86	163.5	
3	1,714	13.67	12.1	
4	1,791	14.15	12.0	
5	5,655	102.53	27.5	
6	7,509	37.62	7.6	
7	10,380	75.00	10.9	Upper Marker

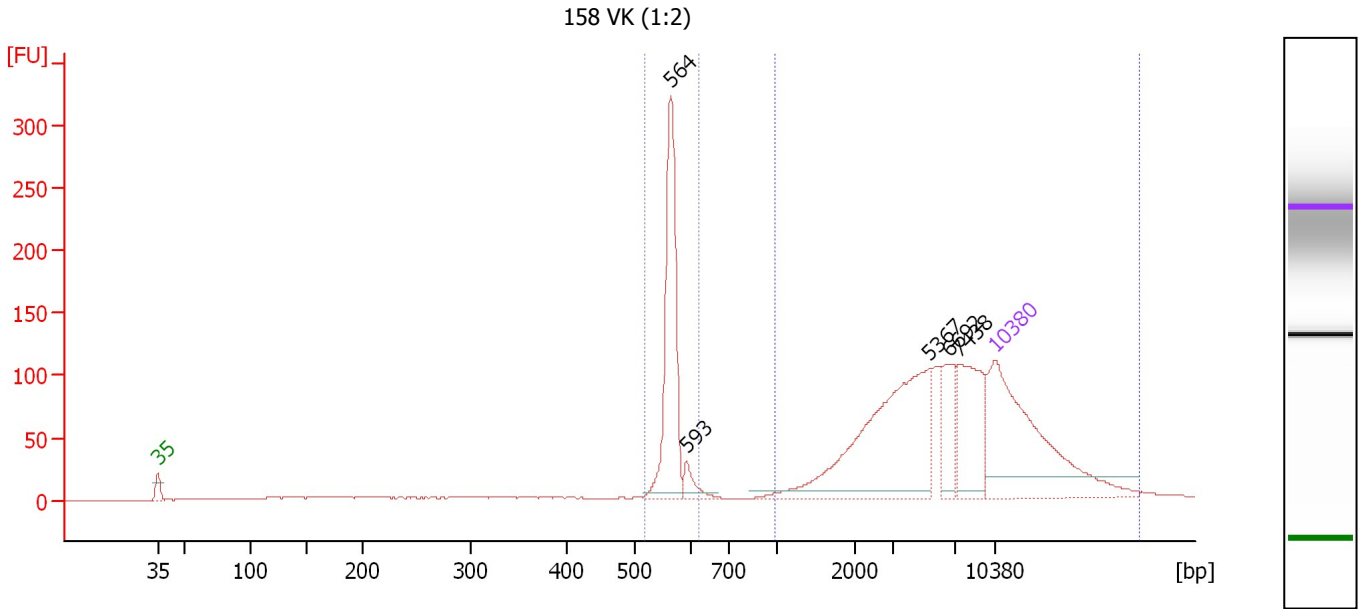
**Region table for sample 10 : 157 VK (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
522	628	575	162.9	61.85	308.2	18	2.3

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
 Modified: 7/3/2014 8:05:12 AM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : 158 VK (1:2)**

Number of peaks found: 5                      Corr. Area 1: 399.0  
 Noise: 0.2                                      Corr. Area 2: 1,033.6

**Peak table for sample 11 : 158 VK (1:2)**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	564	78.36	210.6	
3	593	7.11	18.2	
4	5,367	98.54	27.8	
5	6,692	20.94	4.7	
6	7,438	38.53	7.8	
7	10,380	75.00	10.9	Upper Marker

**Region table for sample 11 : 158 VK (1:2)**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
515	620	565	230.0	85.77	399.0	24	2.4
997	22,049	7,725	72.7	177.64	1,033.6	63	60.9

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-07-02\2014-07-02\_001.xad

Created: 7/2/2014 3:01:54 PM  
Modified: 7/3/2014 8:05:12 AM

**Gel Image**

