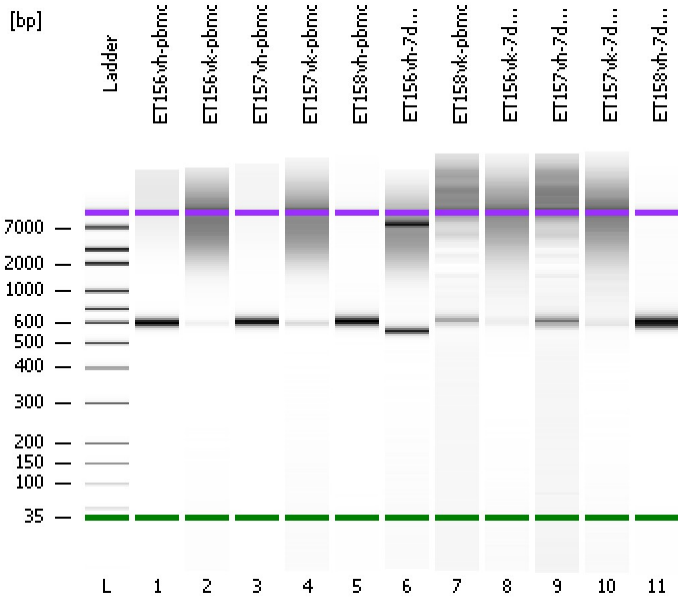


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
Modified: 8/21/2014 12:04:50 PM

Electrophoresis File Run Summary



Instrument Information:

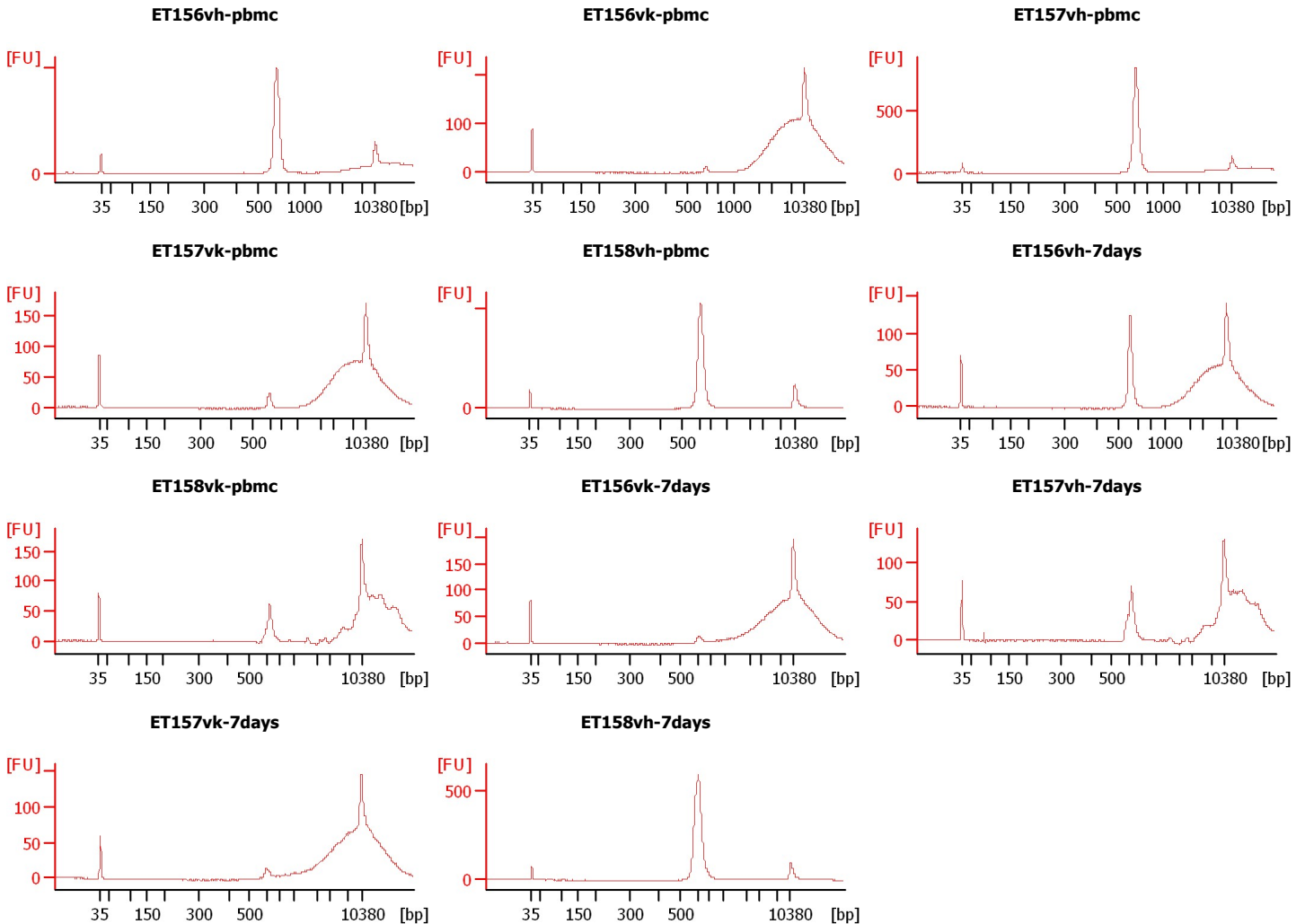
Instrument Name: DE13701086 Firmware: C.01.069
Serial#: DE13701086 Type: G2938B

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:



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
ET156vh-pbmc		<input type="checkbox"/>	✓			
ET156vk-pbmc		<input type="checkbox"/>	✓			
ET157vh-pbmc		<input type="checkbox"/>	✓			
ET157vk-pbmc		<input type="checkbox"/>	✓			
ET158vh-pbmc		<input type="checkbox"/>	✓			
ET156vh-7days		<input type="checkbox"/>	✓			
ET158vk-pbmc		<input type="checkbox"/>	✓			
ET156vk-7days		<input type="checkbox"/>	✓			
ET157vh-7days		<input type="checkbox"/>	✓			
ET157vk-7days		<input type="checkbox"/>	✓			
ET158vh-7days		<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\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
Modified: 8/21/2014 12:04:50 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

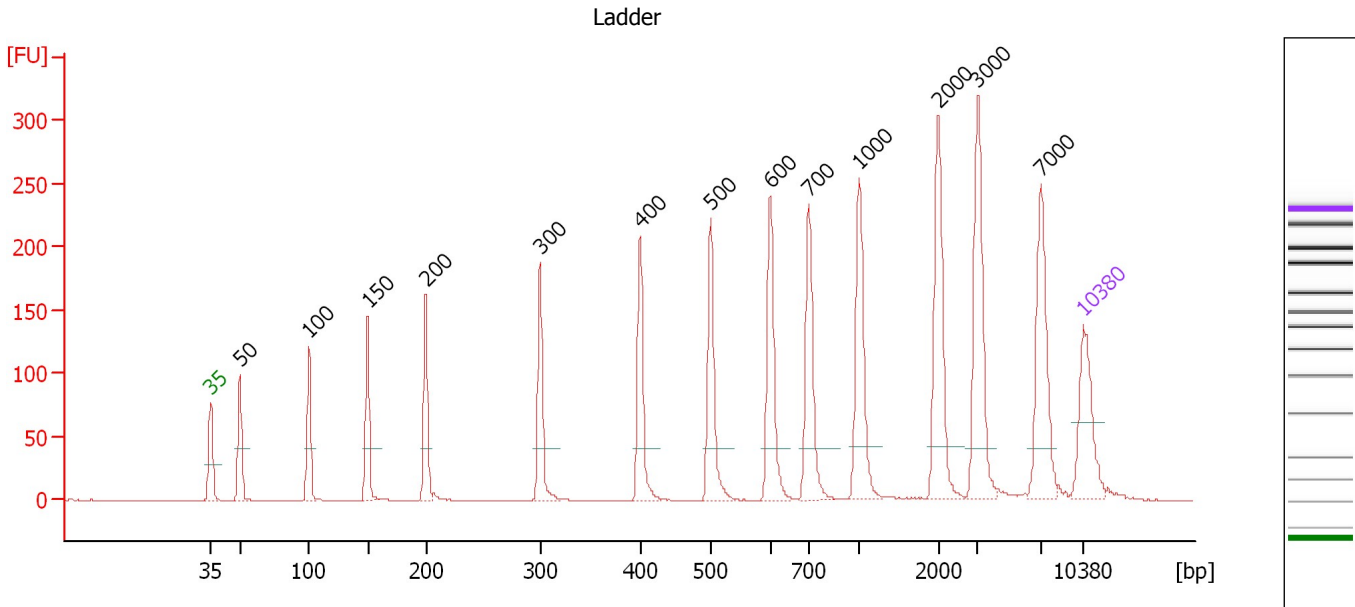
Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

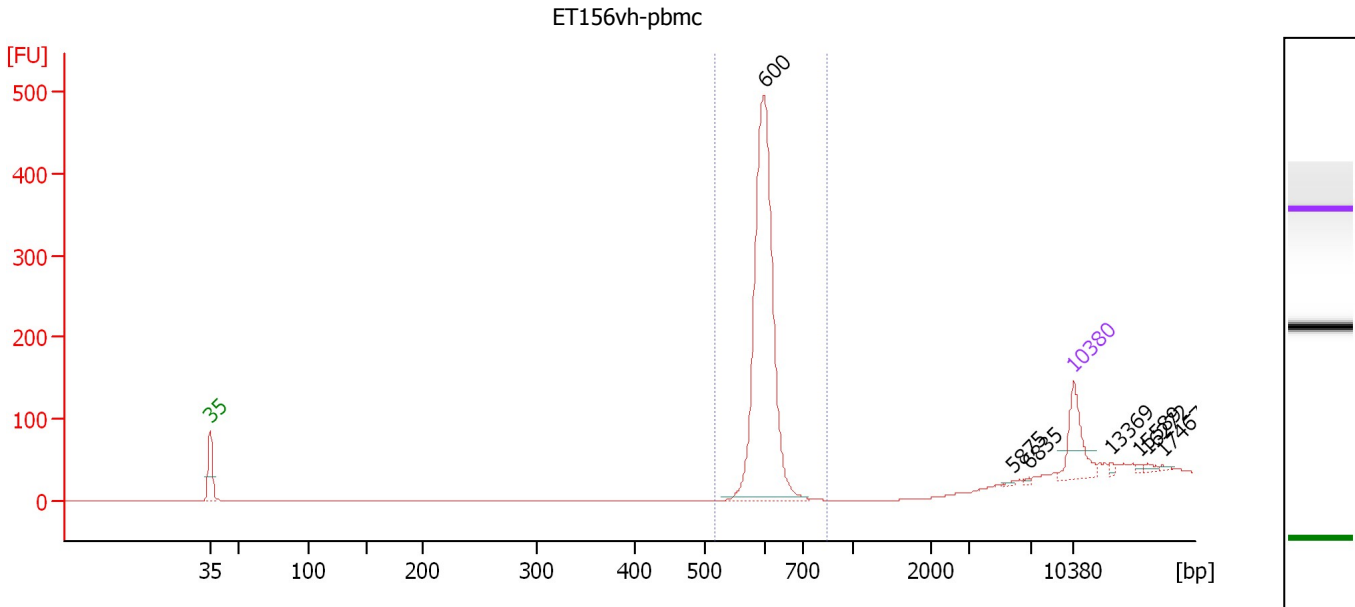
Peak table for Ladder

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:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : ET156vh-pbmc

Number of peaks found: 7 Corr. Area 1: 895.8
 Noise: 0.2

Peak table for sample 1 : ET156vh-pbmc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	600	708.07	1,788.3	
3	5,875	3.07	0.8	
4	6,835	2.42	0.5	
5	10,380	75.00	10.9	Upper Marker
6	13,369	0.00	0.0	
7	15,589	0.00	0.0	
8	16,272	0.00	0.0	
9	17,467	0.00	0.0	

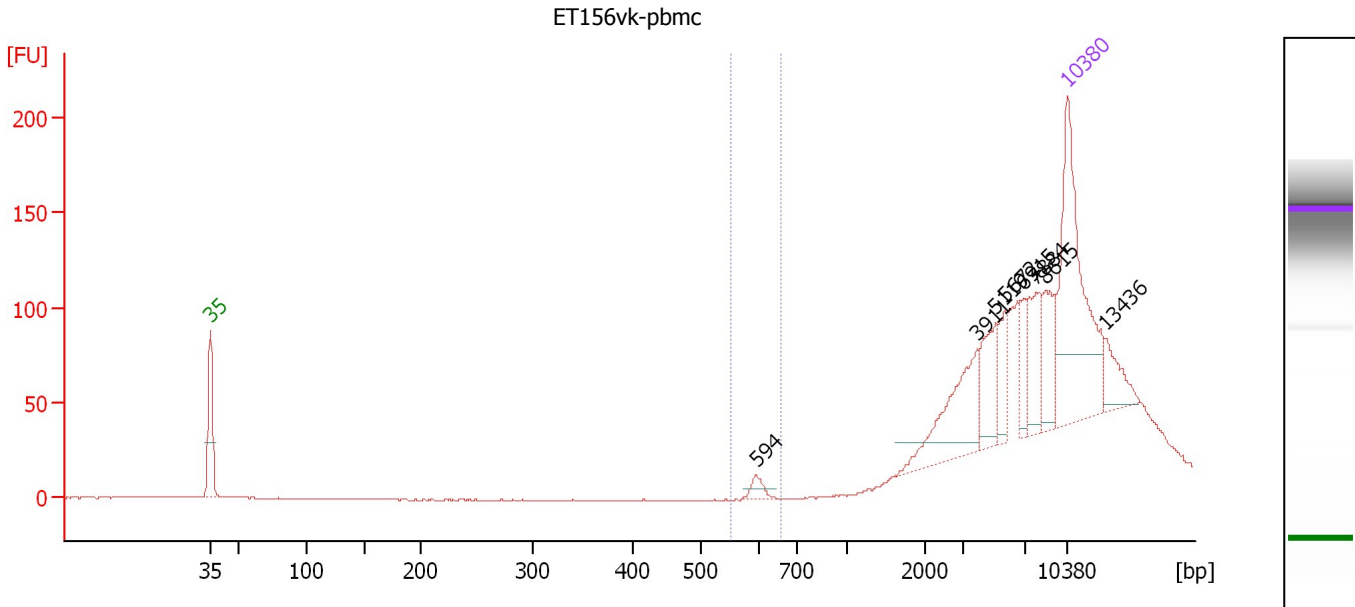
Region table for sample 1 : ET156vh-pbmc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
518	844	602	1,571.8	624.40	895.8	94	2.7

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : ET156vk-pbmc

Number of peaks found: 8 Corr. Area 1: 0.1
 Noise: 0.3

Peak table for sample 2 : ET156vk-pbmc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	594	5.33	13.6	
3	3,911	40.29	15.6	
4	5,119	22.34	6.6	
5	5,672	12.71	3.4	
6	6,915	9.94	2.2	
7	7,884	20.96	4.0	
8	8,615	18.78	3.3	
9	10,380	75.00	10.9	Upper Marker
10	13,436	0.00	0.0	

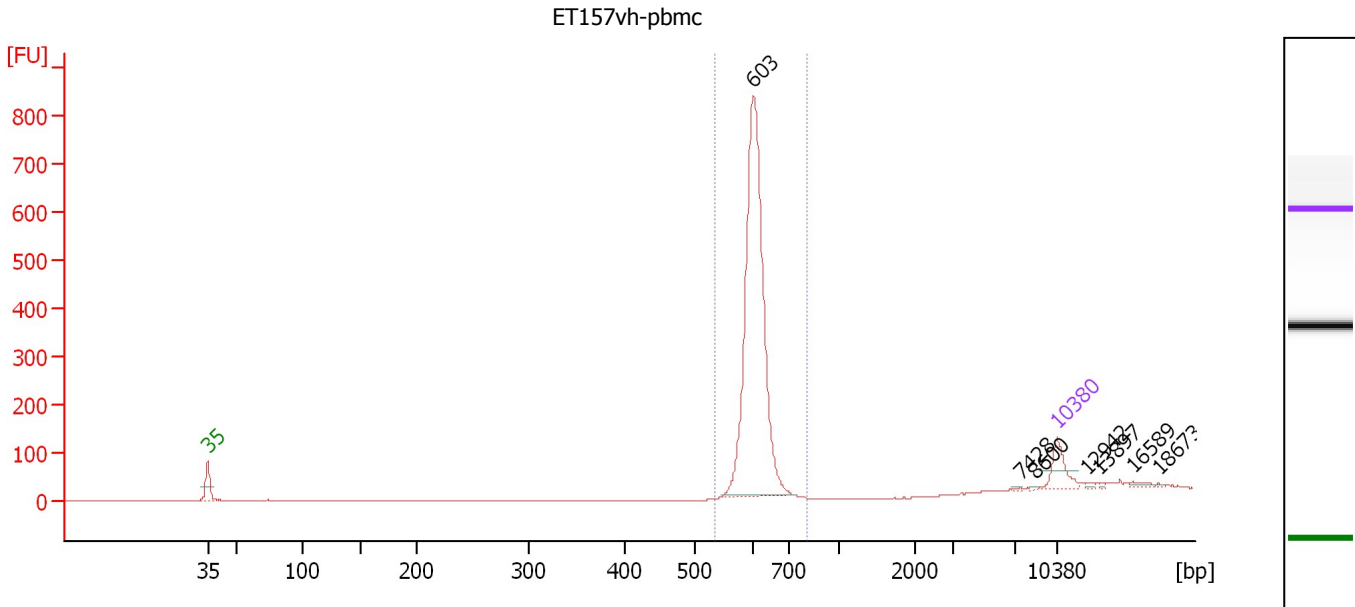
Region table for sample 2 : ET156vk-pbmc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
552	658	594	0.1	0.04	0.1	0	0.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : ET157vh-pbmc

Number of peaks found: 7 Corr. Area 1: 1,609.8
 Noise: 0.4

Peak table for sample 3 : ET157vh-pbmc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	603	1,347.77	3,385.6	
3	7,428	2.17	0.4	
4	8,600	2.66	0.5	
5	10,380	75.00	10.9	Upper Marker
6	12,942	0.00	0.0	
7	13,897	0.00	0.0	
8	16,589	0.00	0.0	
9	18,673	0.00	0.0	

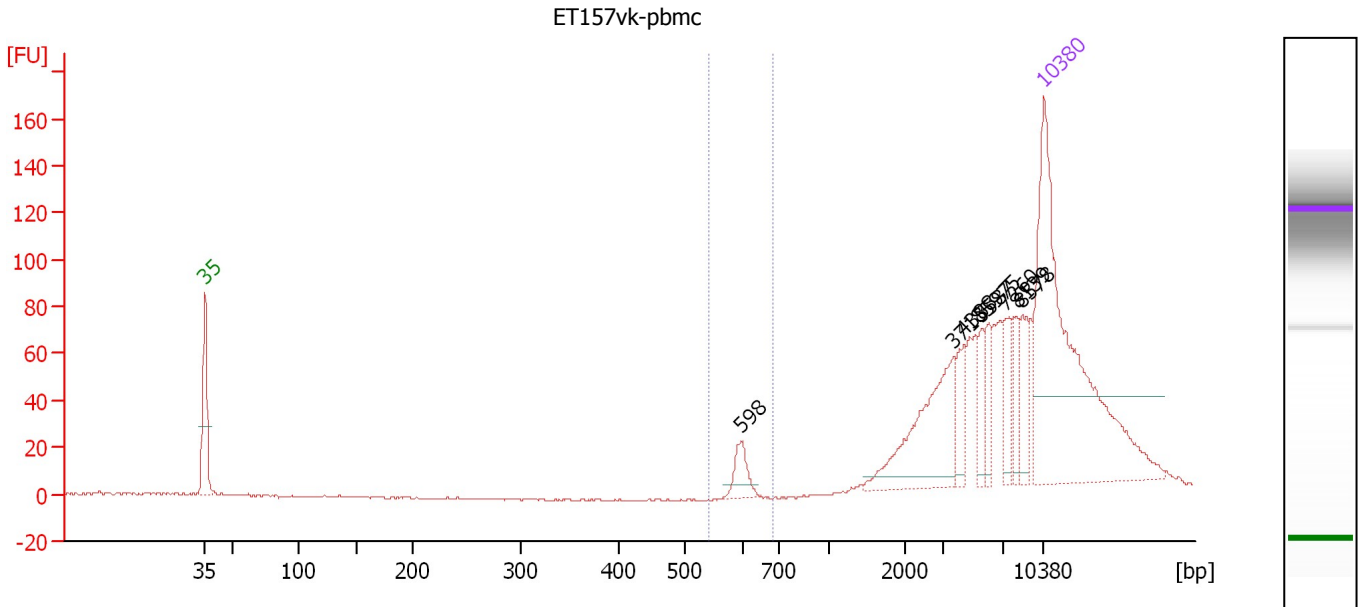
Region table for sample 3 : ET157vh-pbmc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
537	811	609	3,260.6	1,309.57	1,609.8	96	3.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : ET157vk-pbmc

Number of peaks found: 8 Corr. Area 1: 23.9
 Noise: 0.5

Peak table for sample 4 : ET157vk-pbmc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	598	7.07	17.9	
3	3,718	32.90	13.4	
4	4,388	7.95	2.7	
5	5,587	6.52	1.8	
6	5,975	6.76	1.7	
7	7,260	7.92	1.7	
8	8,139	6.80	1.3	
9	8,578	7.62	1.3	
10	10,380	75.00	10.9	Upper Marker

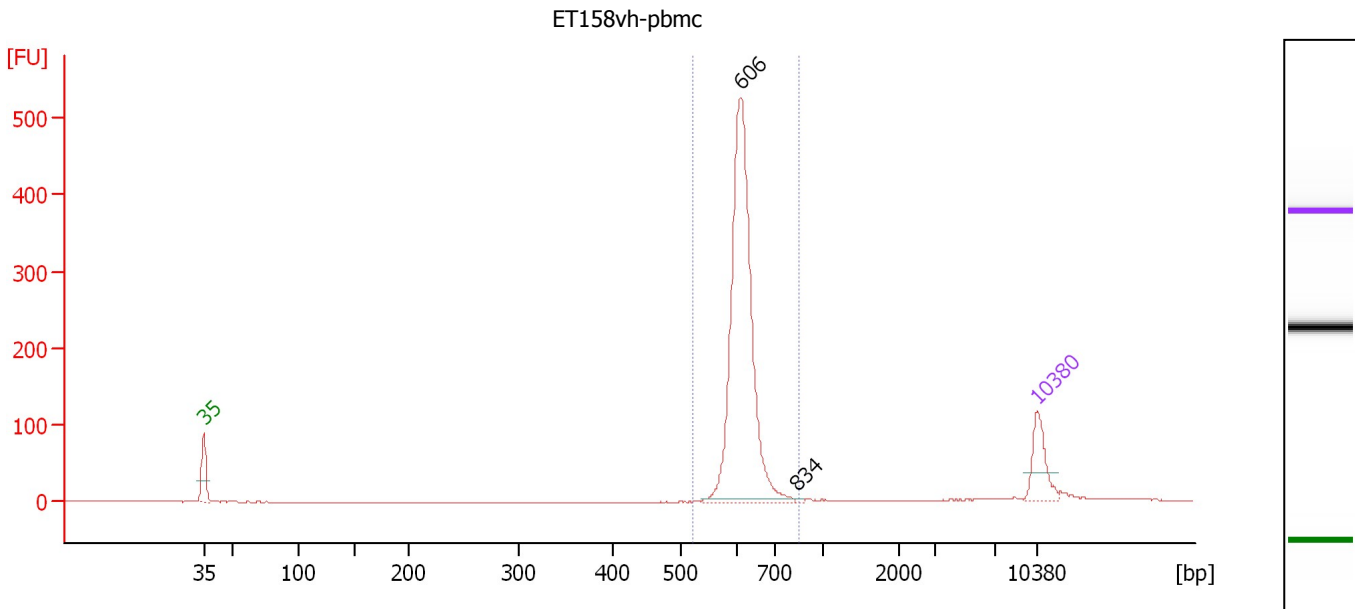
Region table for sample 4 : ET157vk-pbmc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
540	679	597	12.3	4.84	23.9	4	1.5

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : ET158vh-pbmc

Number of peaks found: 2 Corr. Area 1: 1,185.8
 Noise: 0.5

Peak table for sample 5 : ET158vh-pbmc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	606	859.00	2,147.9	
3	834	2.79	5.1	
4	10,380	75.00	10.9	Upper Marker

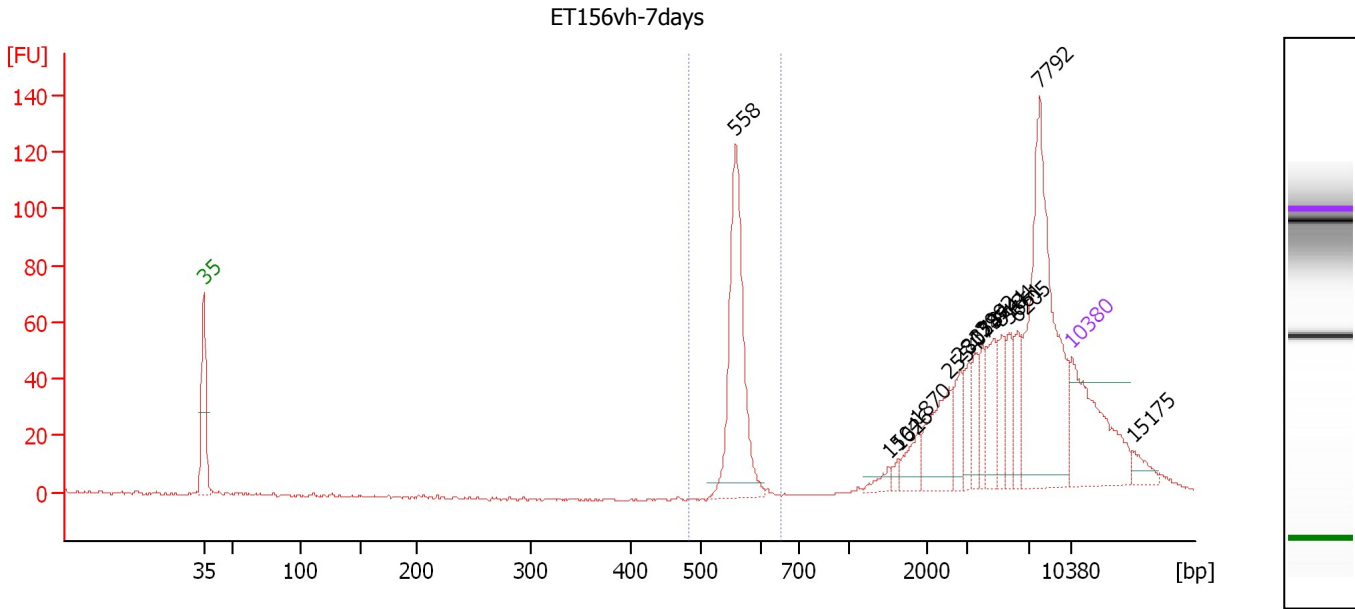
Region table for sample 5 : ET158vh-pbmc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
519	857	615	2,113.7	856.56	1,185.8	95	5.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : ET156vh-7days

Number of peaks found: 15 Corr. Area 1: 183.7
 Noise: 0.5

Peak table for sample 6 : ET156vh-7days

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	558	157.97	428.7	
3	1,504	7.71	7.8	
4	1,626	4.19	3.9	
5	1,870	17.46	14.1	
6	2,554	45.85	27.2	
7	2,812	20.06	10.8	
8	3,073	17.39	8.6	
9	3,584	17.63	7.5	
10	3,992	17.13	6.5	
11	4,741	30.08	9.6	
12	5,184	21.17	6.2	
13	5,661	18.52	5.0	
14	6,205	21.54	5.3	
15	7,792	170.01	33.1	
16	10,380	75.00	10.9	Upper Marker
17	15,175	0.00	0.0	

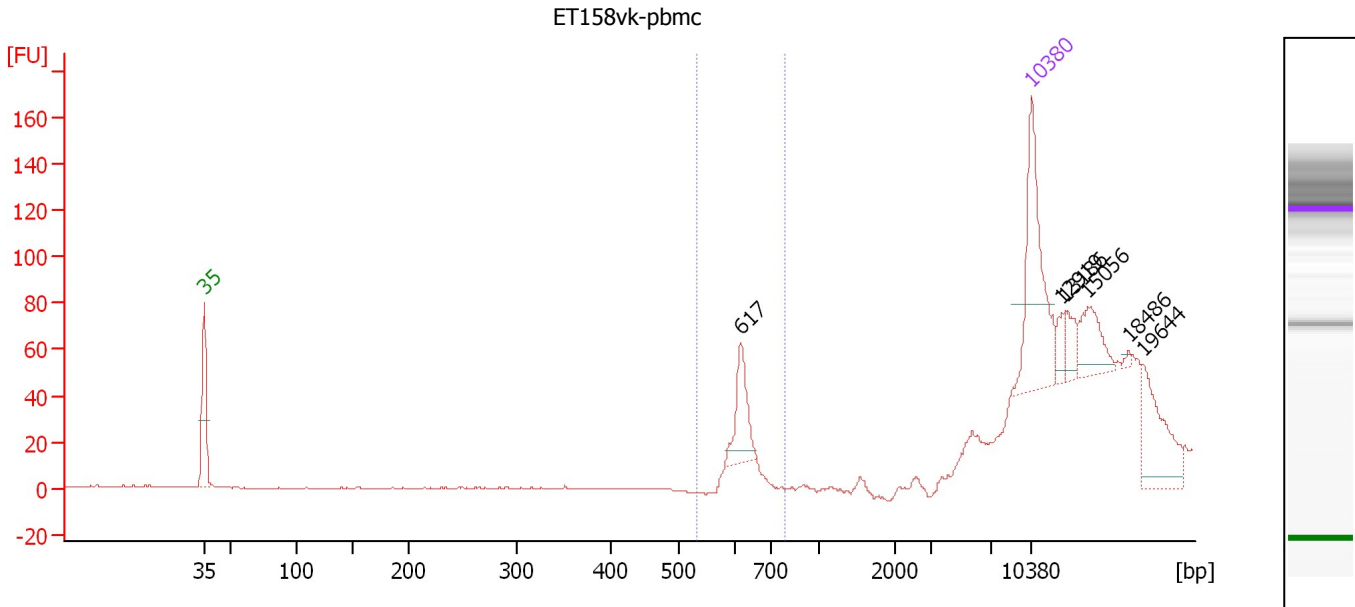
Region table for sample 6 : ET156vh-7days

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
483	655	560	394.5	145.93	183.7	22	2.0

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : ET158vk-pbmc

Number of peaks found: 6 Corr. Area 1: 70.2
 Noise: 0.3

Peak table for sample 7 : ET158vk-pbmc

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	617	38.38	94.2	
3	10,380	75.00	10.9	Upper Marker
4	12,919	0.00	0.0	
5	13,186	0.00	0.0	
6	15,056	0.00	0.0	
7	18,486	0.00	0.0	
8	19,644	0.00	0.0	

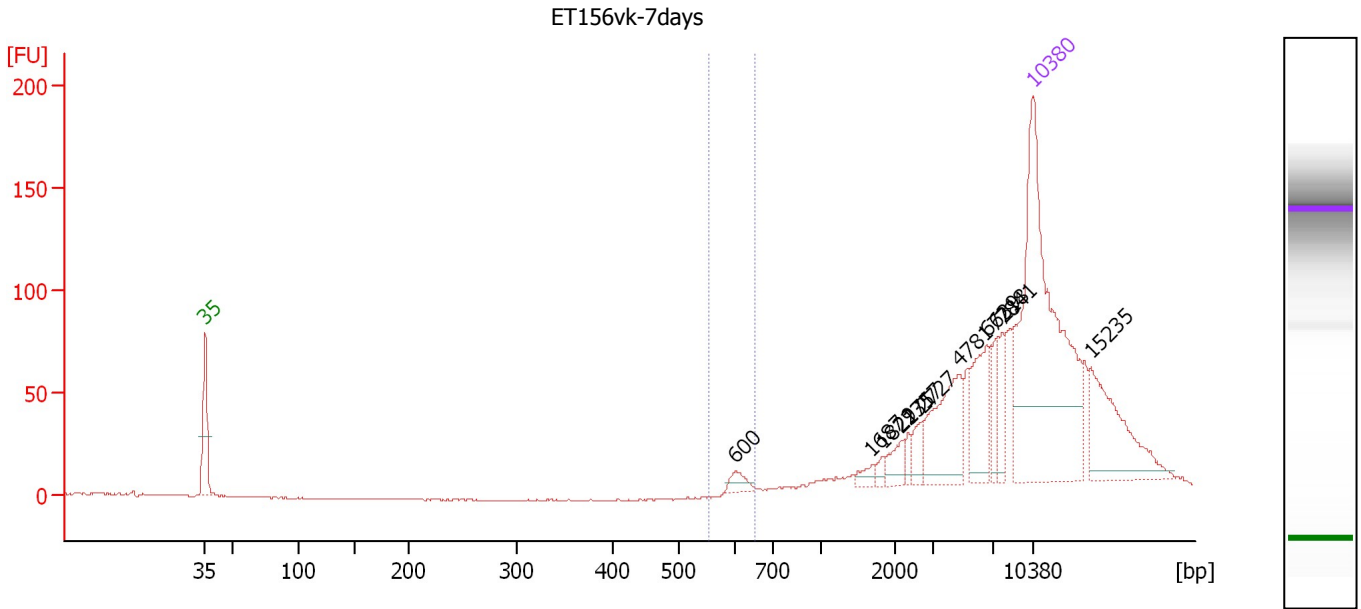
Region table for sample 7 : ET158vk-pbmc

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
534	780	619	100.6	41.11	70.2	15	2.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : ET156vk-7days

Number of peaks found: 11 Corr. Area 1: 10.4
 Noise: 0.3

Peak table for sample 8 : ET156vk-7days

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	600	3.40	8.6	
3	1,687	2.21	2.0	
4	1,829	1.64	1.4	
5	2,171	4.39	3.1	
6	2,357	2.15	1.4	
7	2,727	4.29	2.4	
8	4,781	21.78	6.9	
9	6,639	14.84	3.4	
10	7,218	5.91	1.2	
11	7,841	6.07	1.2	
12	10,380	75.00	10.9	Upper Marker
13	15,235	0.00	0.0	

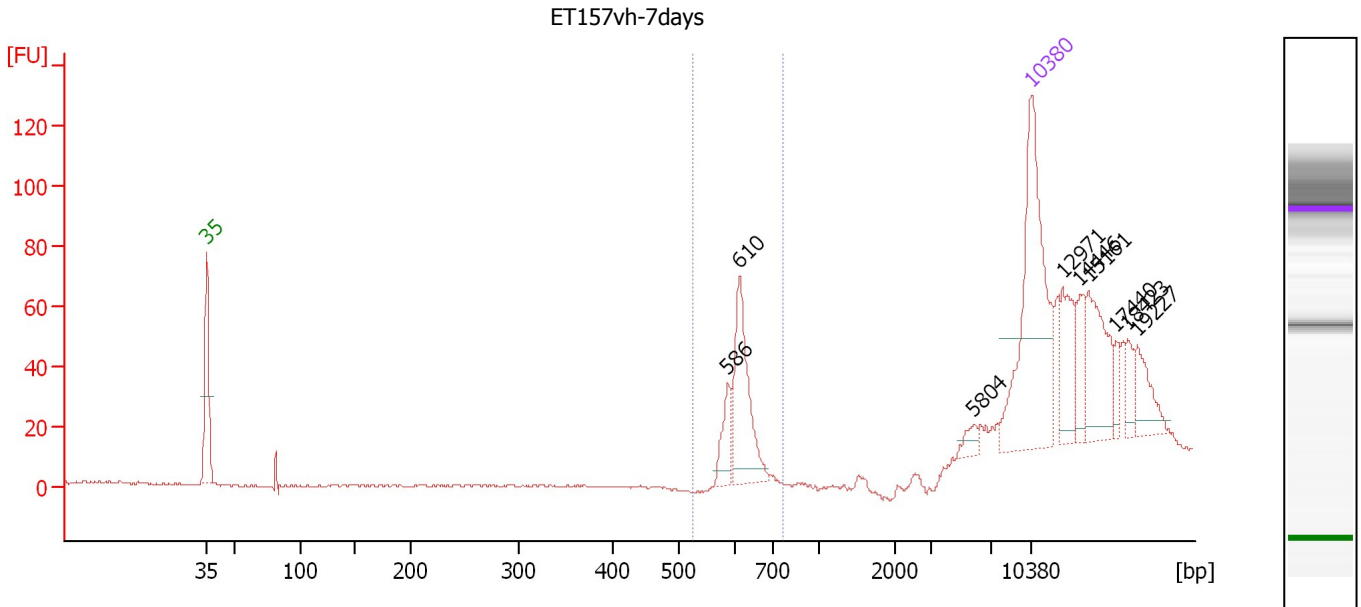
Region table for sample 8 : ET156vk-7days

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
553	654	608	4.9	1.95	10.4	1	2.2

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : ET157vh-7days

Number of peaks found: 9 Corr. Area 1: 106.5
 Noise: 0.4

Peak table for sample 9 : ET157vh-7days

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	586	14.75	38.1	
3	610	45.35	112.6	
4	5,804	4.51	1.2	
5	10,380	75.00	10.9	Upper Marker
6	12,971	0.00	0.0	
7	14,446	0.00	0.0	
8	15,161	0.00	0.0	
9	17,440	0.00	0.0	
10	18,423	0.00	0.0	
11	19,227	0.00	0.0	

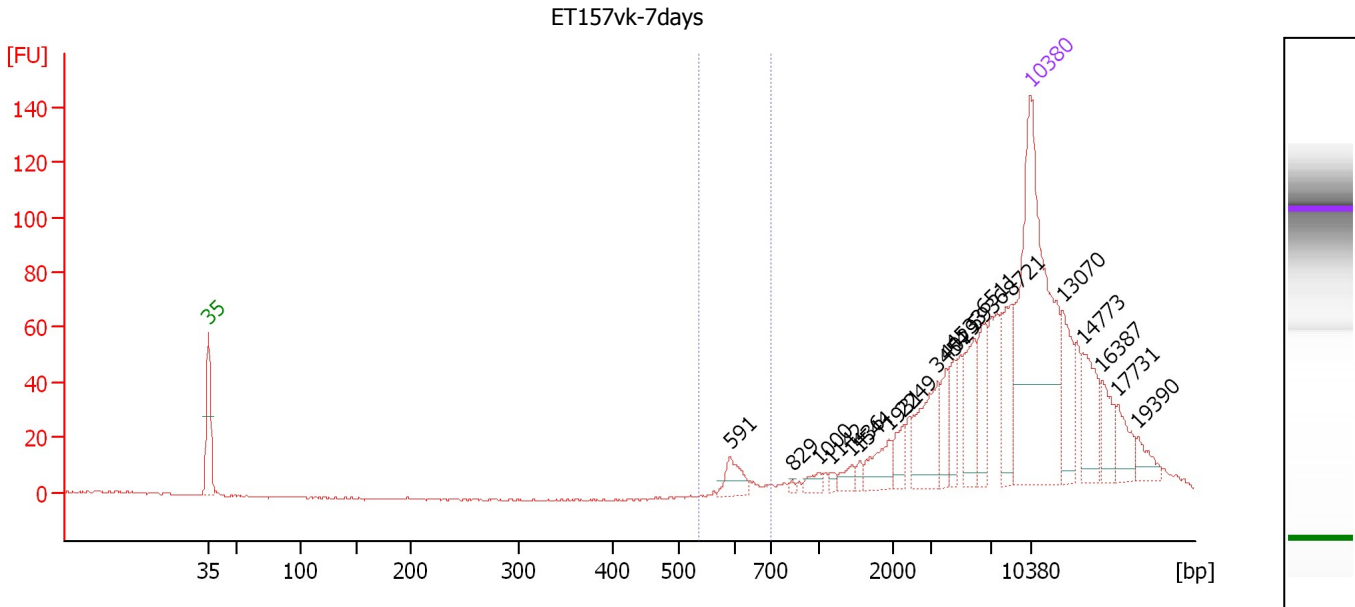
Region table for sample 9 : ET157vh-7days

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
524	766	610	113.7	45.75	106.5	23	3.3

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : ET157vk-7days

Number of peaks found: 19 Corr. Area 1: 18.7
 Noise: 0.4

Peak table for sample 10 : ET157vk-7days

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	591	7.67	19.7	
3	829	0.83	1.5	
4	1,000	2.99	4.5	
5	1,142	1.12	1.5	
6	1,436	3.23	3.4	
7	1,544	1.67	1.6	
8	1,931	8.47	6.6	
9	2,249	5.55	3.7	
10	3,454	17.94	7.9	
11	4,029	7.42	2.8	
12	4,533	6.74	2.3	
13	5,936	13.44	3.4	
14	6,511	12.63	2.9	
15	8,721	14.10	2.4	
16	10,380	75.00	10.9	Upper Marker
17	13,070	0.00	0.0	
18	14,773	0.00	0.0	
19	16,387	0.00	0.0	
20	17,731	0.00	0.0	
21	19,390	0.00	0.0	

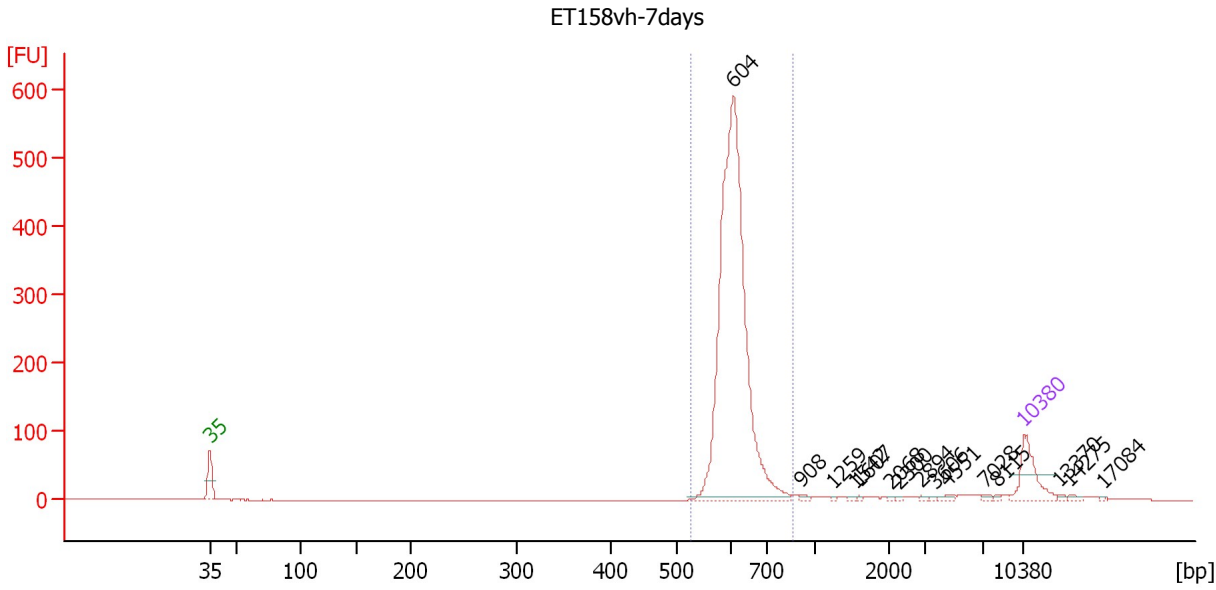
Region table for sample 10 : ET157vk-7days

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
534	697	606	14.0	5.59	18.7	3	3.6

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : ET158vh-7days

Number of peaks found: 15 Corr. Area 1: 1,657.7
 Noise: 0.4

Peak table for sample 11 : ET158vh-7days

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	604	1,228.90	3,083.9	
3	908	5.77	9.6	
4	1,259	2.84	3.4	
5	1,542	2.99	2.9	
6	1,607	2.48	2.3	
7	2,068	2.51	1.8	
8	2,300	2.21	1.5	
9	2,894	3.48	1.8	
10	3,606	2.80	1.2	
11	4,551	6.27	2.1	
12	7,028	4.81	1.0	
13	8,115	2.88	0.5	
14	10,380	75.00	10.9	Upper Marker
15	13,370	0.00	0.0	
16	14,275	0.00	0.0	
17	17,084	0.00	0.0	

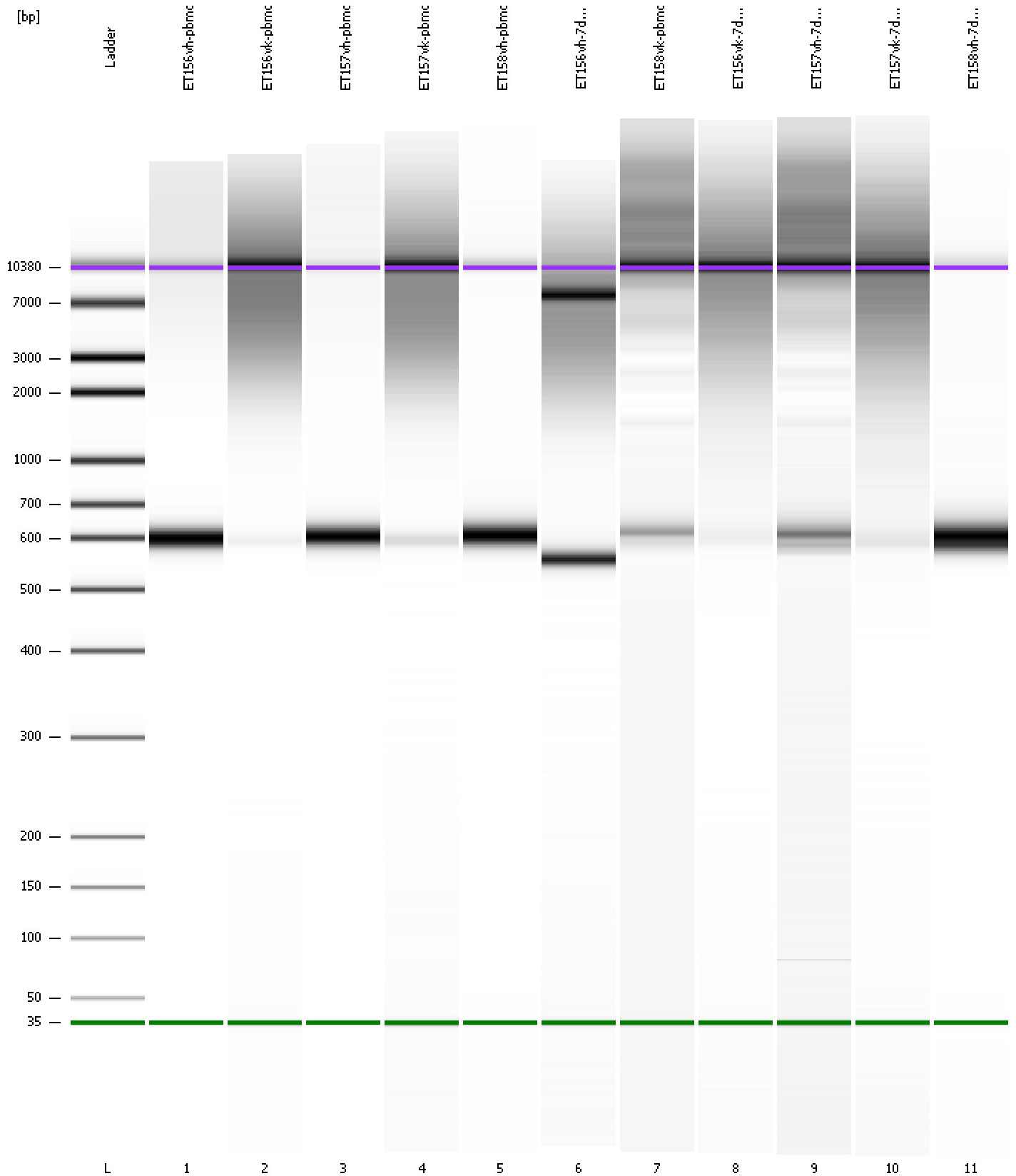
Region table for sample 11 : ET158vh-7days

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Co Corr. lor Area	% of Total	Size distribution in CV [%]
526	861	612	3,070.0	1,235.26	1,657.7	92	6.0

Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
Modified: 8/21/2014 12:04:50 PM

Gel Image

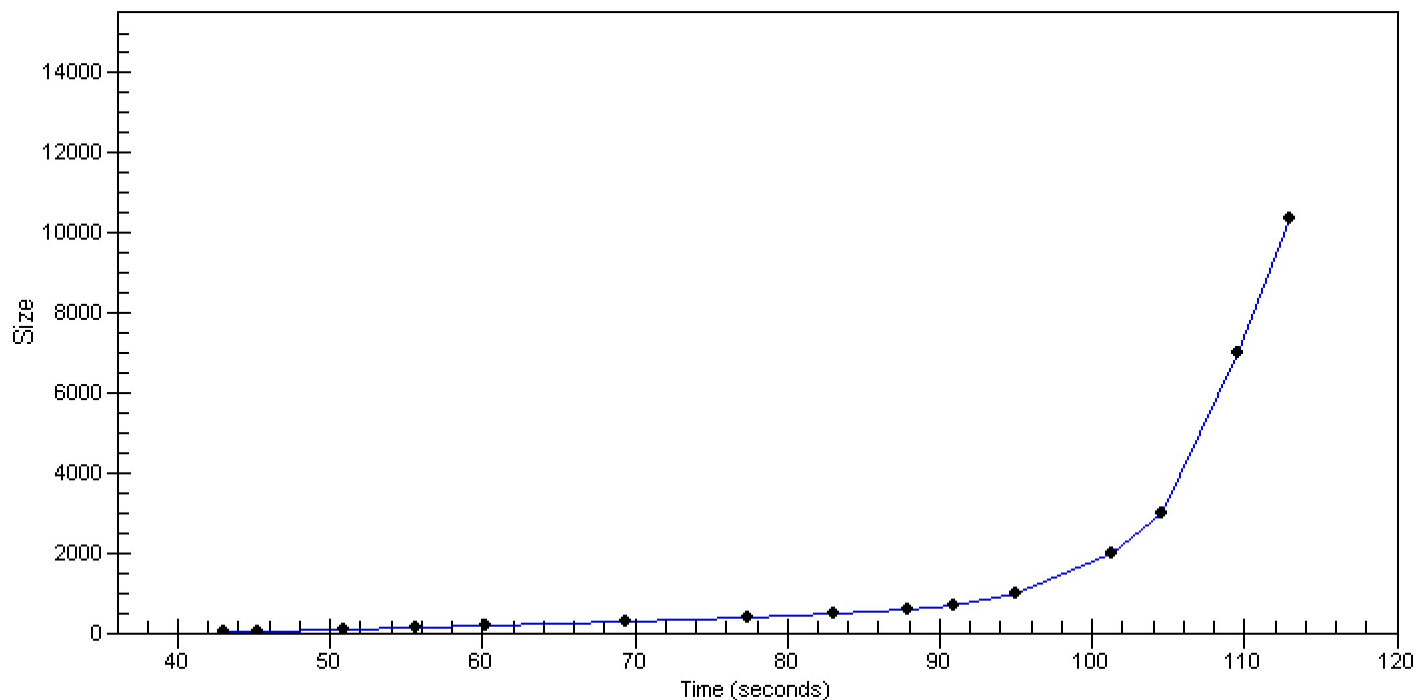


Assay Class: High Sensitivity DNA Assay
Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
Modified: 8/21/2014 12:04:50 PM

Curves

Standard Curve



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\... bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad

Created: 8/21/2014 11:19:18 AM
 Modified: 8/21/2014 12:04:50 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		8/21/2014 12:00:35 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Program Files\Agilent\2100 bioanalyzer\2100 expert\Data\2014-08-21\2014-08-21_002.xad)		Instrument	Run		8/21/2014 11:19:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		8/21/2014 11:19:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		8/21/2014 11:19:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		8/21/2014 11:19:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		8/21/2014 11:19:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		8/21/2014 11:19:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		8/21/2014 11:19:24 AM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1