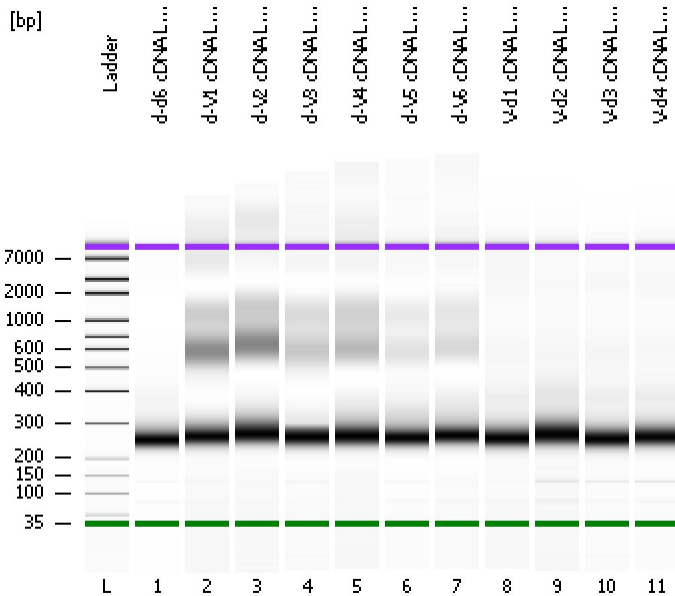


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
Modified: 2/19/2013 4:56:48 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

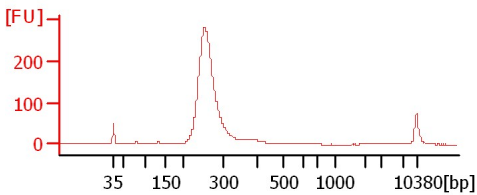
Assay Information:

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

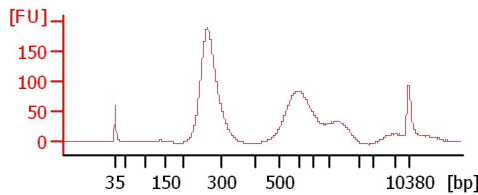
Chip Information:

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

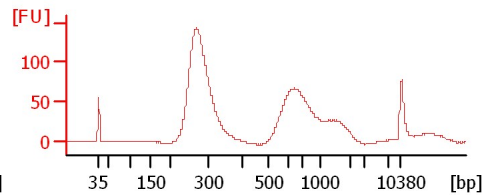
**d-d6 cDNA Lib 1:2**



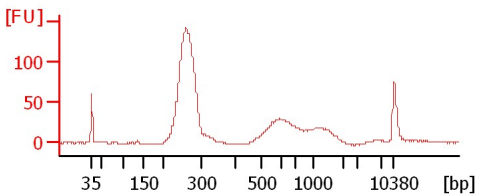
**d-V1 cDNA Lib 1:2**



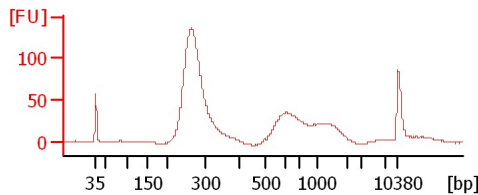
**d-V2 cDNA Lib 1:2**



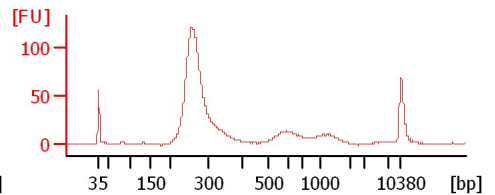
**d-V3 cDNA Lib 1:2**



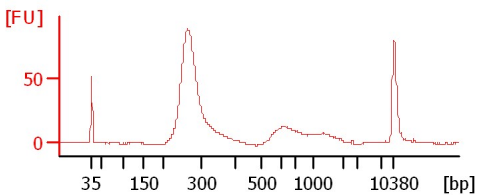
**d-V4 cDNA Lib 1:2**



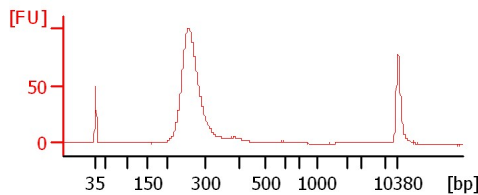
**d-V5 cDNA Lib 1:2**



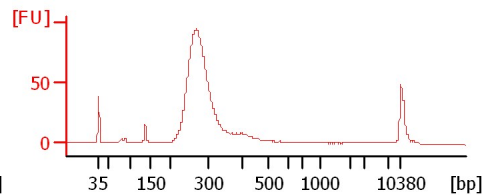
**d-V6 cDNA Lib 1:2**



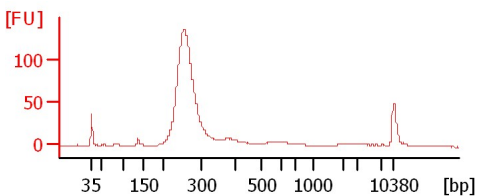
**V-d1 cDNA Lib 1:2**



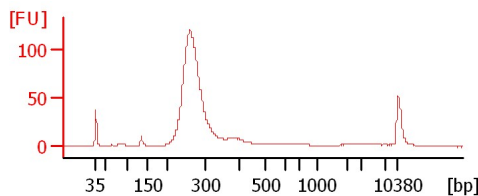
**V-d2 cDNA Lib 1:2**



**V-d3 cDNA Lib 1:2**



**V-d4 cDNA Lib 1:2**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
Modified: 2/19/2013 4:56:48 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
d-d6 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-V1 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-V2 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-V3 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-V4 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-V5 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-V6 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-d1 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-d2 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-d3 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-d4 cDNA Lib 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:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
Modified: 2/19/2013 4:56:48 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/ $\mu$ l] : 1950  
Uses Standard Area for Ladder Fragments  
Lower Marker Concentration [pg/ $\mu$ l] : 125  
Upper Marker Concentration [pg/ $\mu$ l] : 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

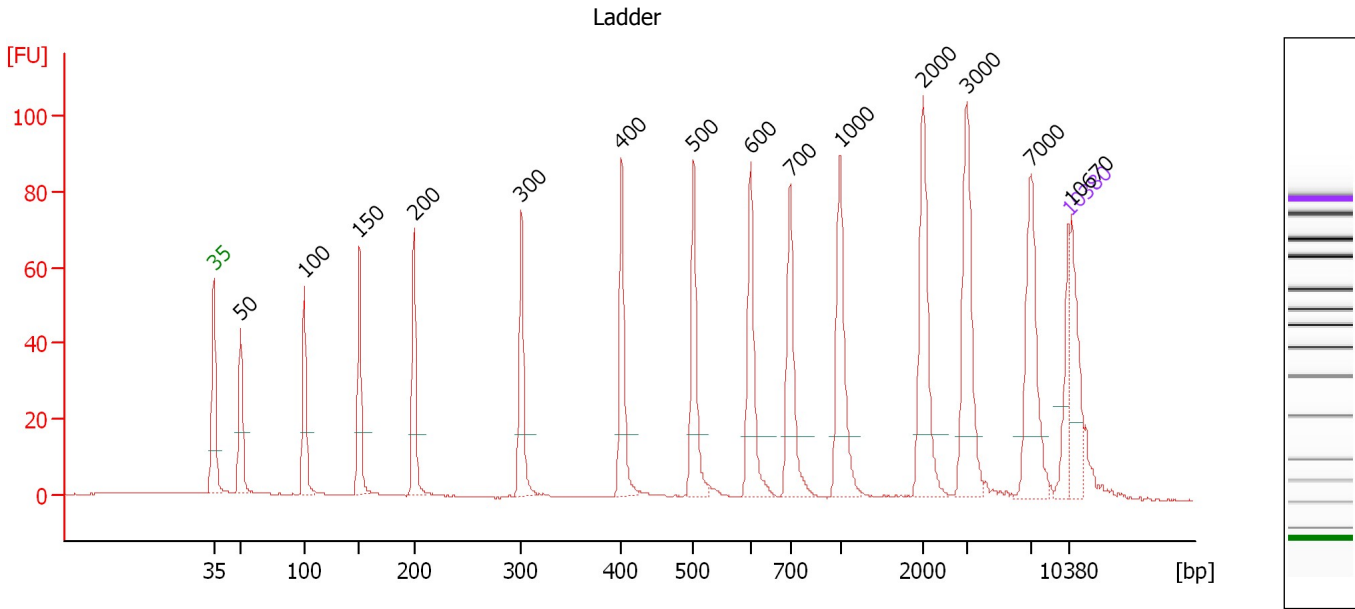
**Ladder**

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:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

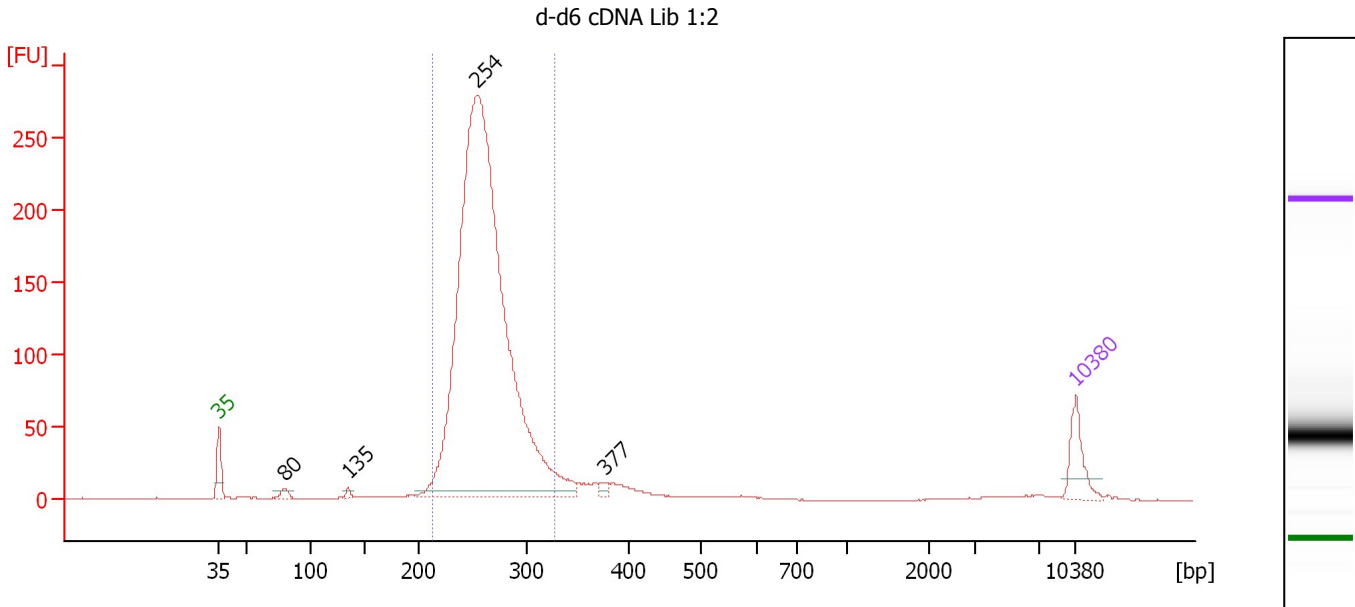
**Peak table for Ladder**

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
16	10,670	0.00	0.0	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : d-d6 cDNA Lib 1:2**

Number of peaks found: 4                      Corr. Area 1: 1,926.1  
 Noise: 0.2

**Peak table for sample 1 : d-d6 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	80	24.03	456.8	
3	135	11.38	128.1	
4	254	3,269.08	19,511.5	
5	377	17.17	69.0	
6	10,380	75.00	10.9	Upper Marker

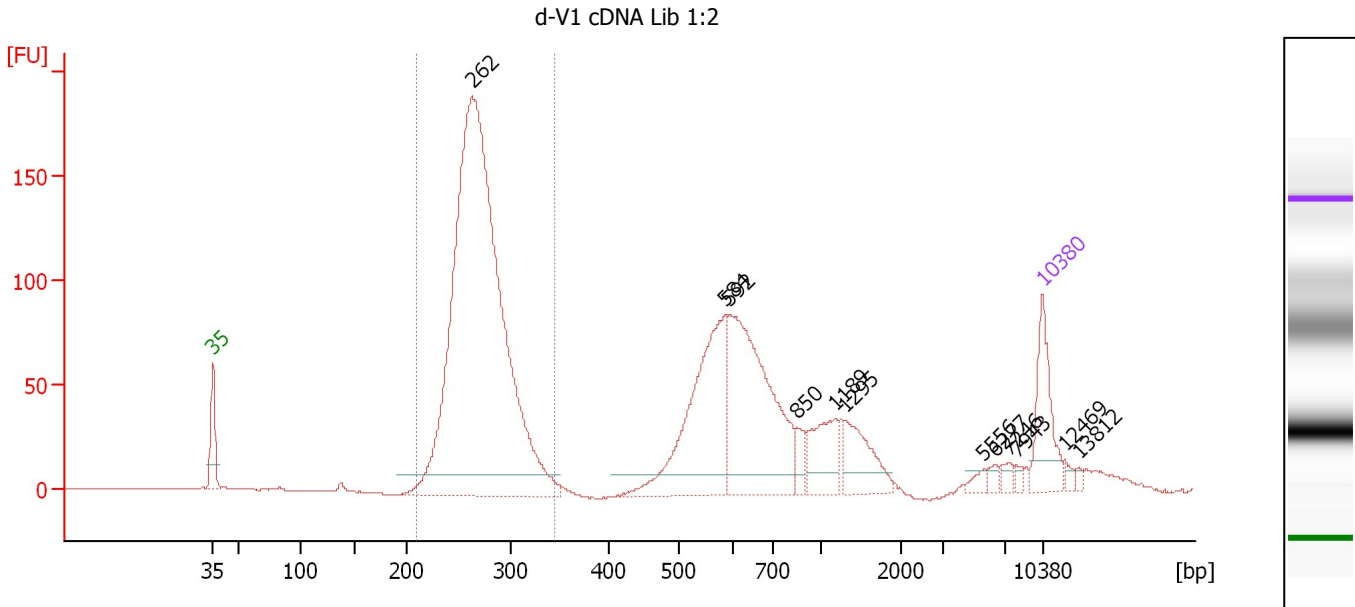
**Region table for sample 1 : d-d6 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
212	326	261	18,543.7	3,179.36	1,926.1	89	8.3	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 2 : d-V1 cDNA Lib 1:2**

Height Threshold [FU] : 10

**Overall Results for sample 2 : d-V1 cDNA Lib 1:2**

Number of peaks found: 12                      Corr. Area 1: 1,338.1  
 Noise: 0.2

**Peak table for sample 2 : d-V1 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	1,561.14	9,020.6	
3	584	306.29	794.5	
4	592	350.84	898.2	
5	850	24.54	43.7	
6	1,189	73.23	93.3	
7	1,295	76.79	89.8	
8	5,556	9.99	2.7	
9	6,277	8.56	2.1	
10	7,246	9.83	2.1	
11	7,943	6.06	1.2	
12	10,380	75.00	10.9	Upper Marker
13	12,469	0.00	0.0	
14	13,812	0.00	0.0	

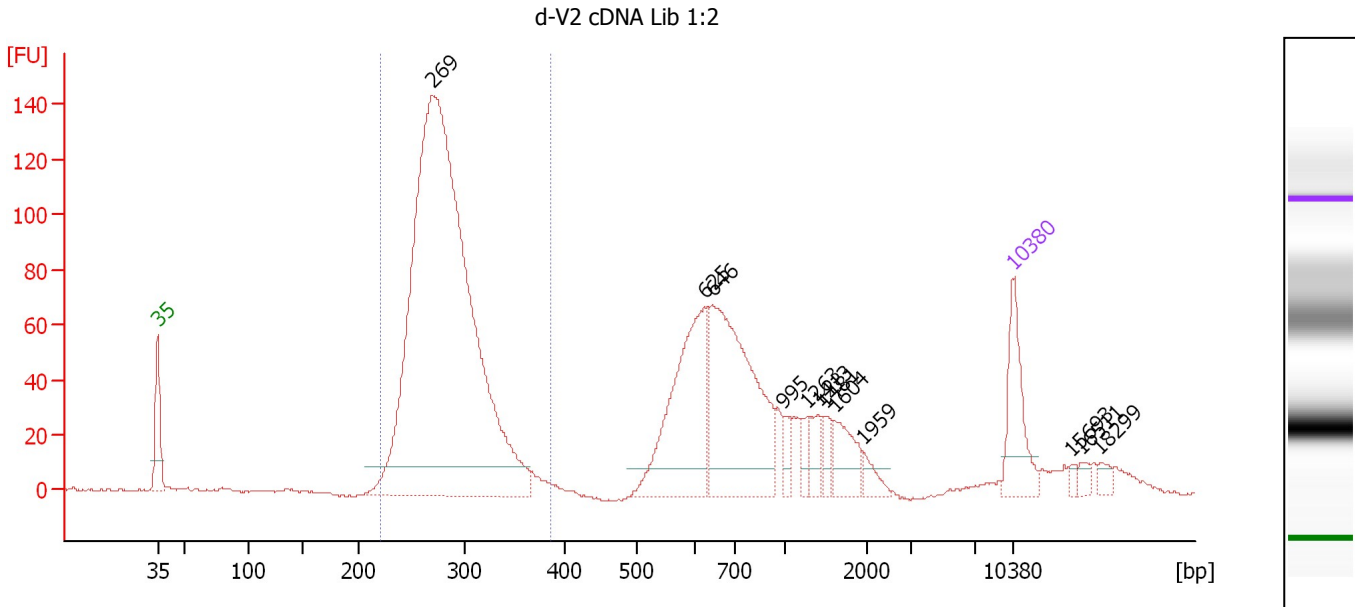
**Region table for sample 2 : d-V1 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
210	345	270	8,285.4	1,469.32	1,338.1	56	8.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 3 : d-V2 cDNA Lib 1:2**

Height Threshold [FU] : 10

**Overall Results for sample 3 : d-V2 cDNA Lib 1:2**

Number of peaks found: 12                      Corr. Area 1: 1,203.9  
 Noise: 0.4

**Peak table for sample 3 : d-V2 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	269	1,631.53	9,192.2	
3	625	265.35	643.6	
4	646	337.30	790.9	
5	995	17.60	26.8	
6	1,263	19.02	22.8	
7	1,413	26.21	28.1	
8	1,481	20.74	21.2	
9	1,604	50.21	47.4	
10	1,959	16.43	12.7	
11	10,380	75.00	10.9	Upper Marker
12	15,693	0.00	0.0	
13	16,511	0.00	0.0	
14	18,299	0.00	0.0	

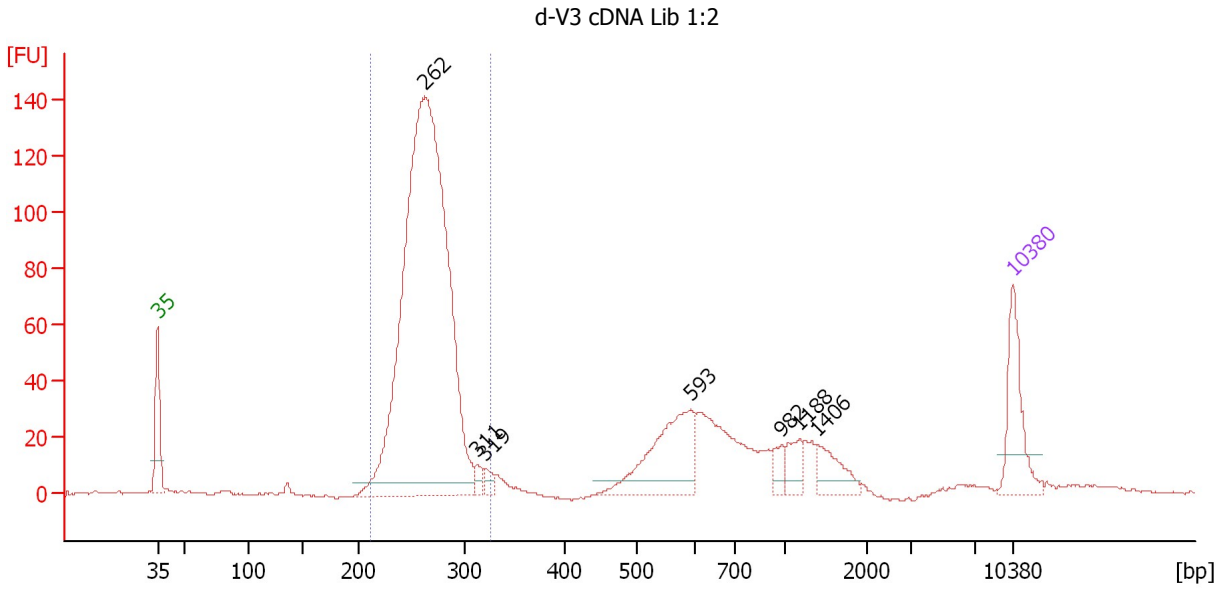
**Region table for sample 3 : d-V2 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	385	282	8,434.2	1,556.76	1,203.9	58	10.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : d-V3 cDNA Lib 1:2**

Number of peaks found: 7                      Corr. Area 1: 931.6  
 Noise: 0.3

**Peak table for sample 4 : d-V3 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	262	1,375.94	7,957.9	
3	311	13.07	63.6	
4	319	14.67	69.6	
5	593	161.71	413.3	
6	982	18.15	28.0	
7	1,188	28.62	36.5	
8	1,406	43.27	46.6	
9	10,380	75.00	10.9	Upper Marker

**Region table for sample 4 : d-V3 cDNA Lib 1:2**

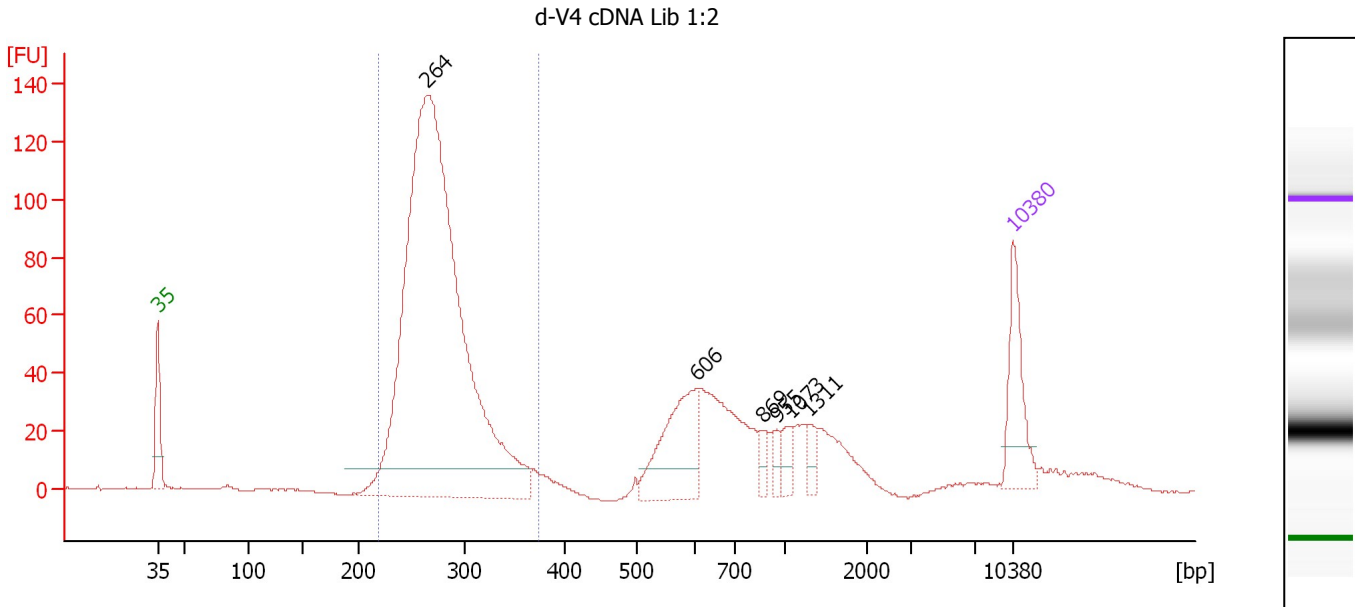
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
213	325	264	7,760.0	1,350.70	931.6	69	7.2	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Setpoint Deviations for sample 5 : d-V4 cDNA Lib 1:2**

Height Threshold [FU] : 10

**Overall Results for sample 5 : d-V4 cDNA Lib 1:2**

Number of peaks found: 6                      Corr. Area 1: 1,045.8  
 Noise: 0.2

**Peak table for sample 5 : d-V4 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	264	1,487.20	8,529.8	
3	606	144.29	360.7	
4	869	15.20	26.5	
5	955	15.65	24.8	
6	1,073	22.37	31.6	
7	1,311	19.54	22.6	
8	10,380	75.00	10.9	Upper Marker

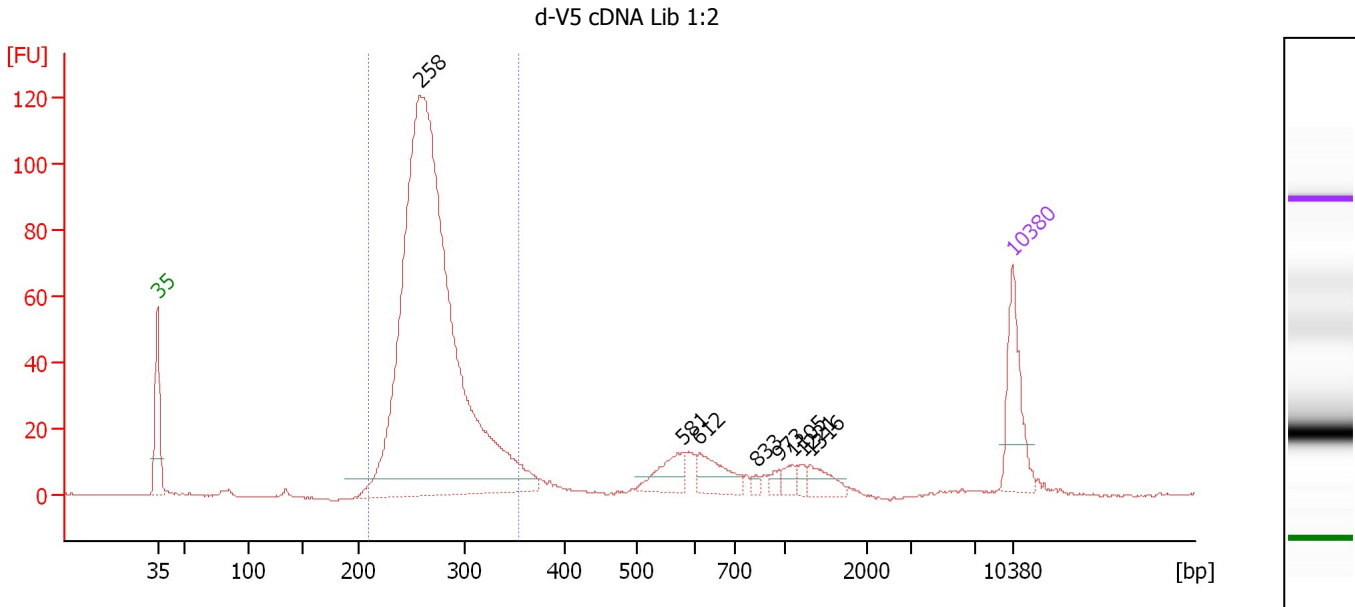
**Region table for sample 5 : d-V4 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
219	373	275	7,521.0	1,353.62	1,045.8	70	10.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : d-V5 cDNA Lib 1:2**

Number of peaks found: 8                      Corr. Area 1: 864.3  
 Noise: 0.3

**Peak table for sample 6 : d-V5 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	258	1,559.84	9,170.5	
3	581	45.56	118.8	
4	612	50.17	124.2	
5	833	6.10	11.1	
6	973	9.83	15.3	
7	1,105	12.85	17.6	
8	1,221	9.45	11.7	
9	1,316	26.03	30.0	
10	10,380	75.00	10.9	Upper Marker

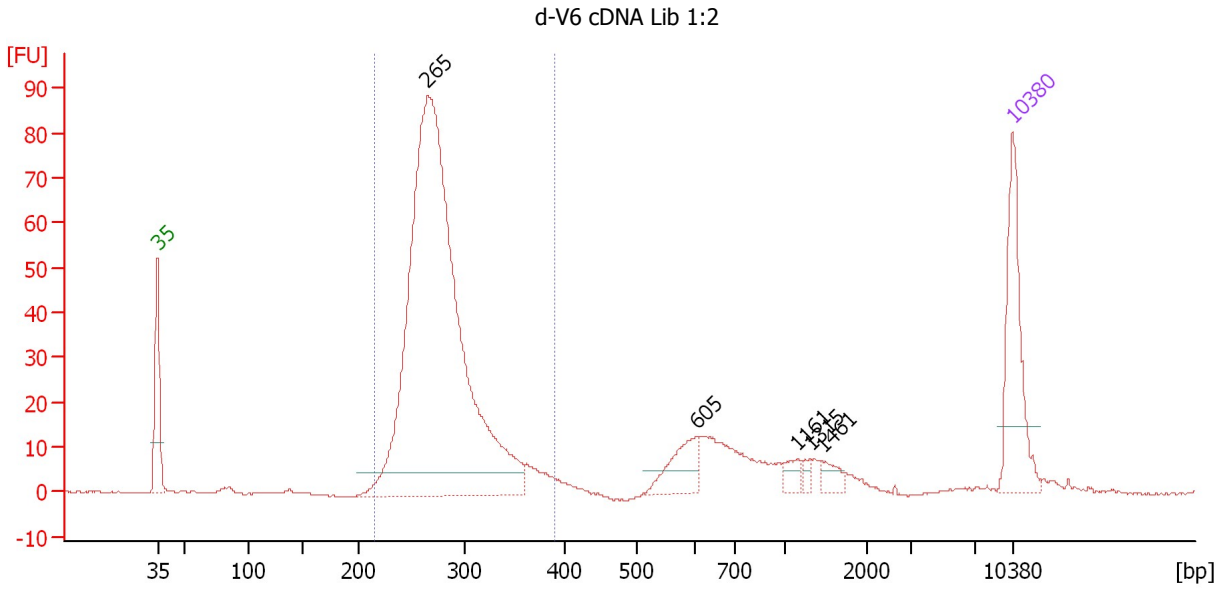
**Region table for sample 6 : d-V5 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
210	354	270	8,315.7	1,471.00	864.3	82	10.0	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : d-V6 cDNA Lib 1:2**

Number of peaks found: 5                      Corr. Area 1: 626.9  
 Noise: 0.2

**Peak table for sample 7 : d-V6 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	265	875.33	5,004.4	
3	605	39.49	99.0	
4	1,161	11.25	14.7	
5	1,315	4.97	5.7	
6	1,461	11.43	11.9	
7	10,380	75.00	10.9	Upper Marker

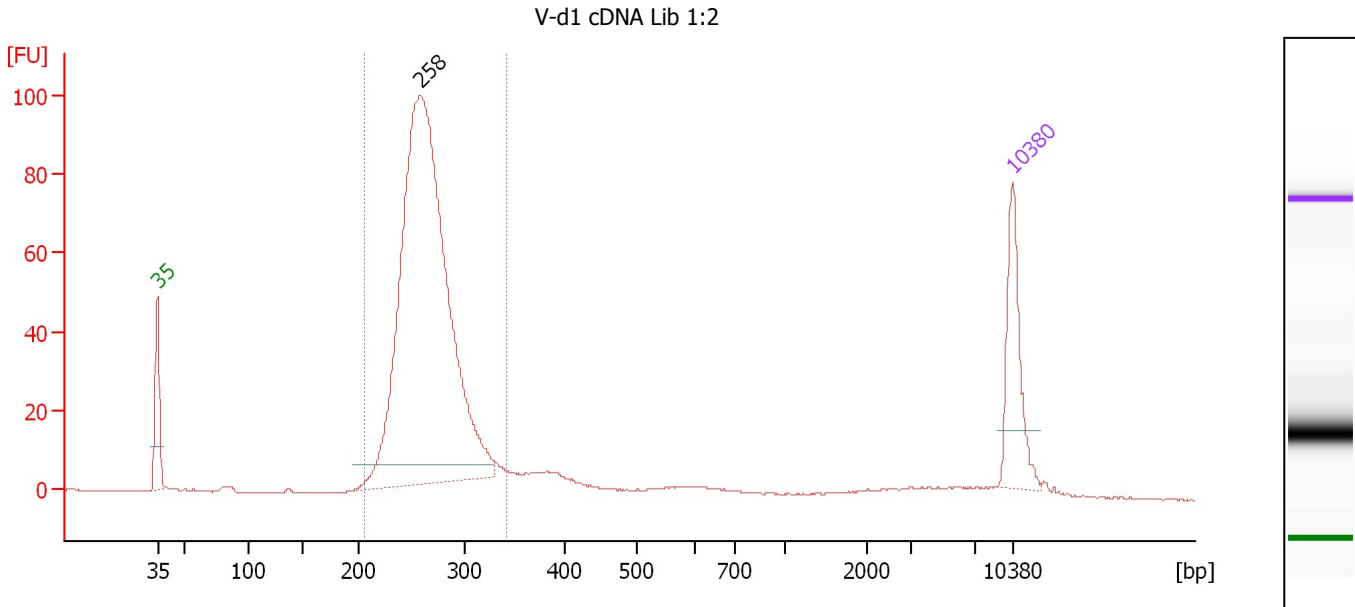
**Region table for sample 7 : d-V6 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
216	390	278	4,628.6	841.06	626.9	81	10.7	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : V-d1 cDNA Lib 1:2**

Number of peaks found: 1                      Corr. Area 1: 720.2  
 Noise: 0.1

**Peak table for sample 8 : V-d1 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	258	1,010.78	5,924.8	
3	10,380	75.00	10.9	Upper Marker

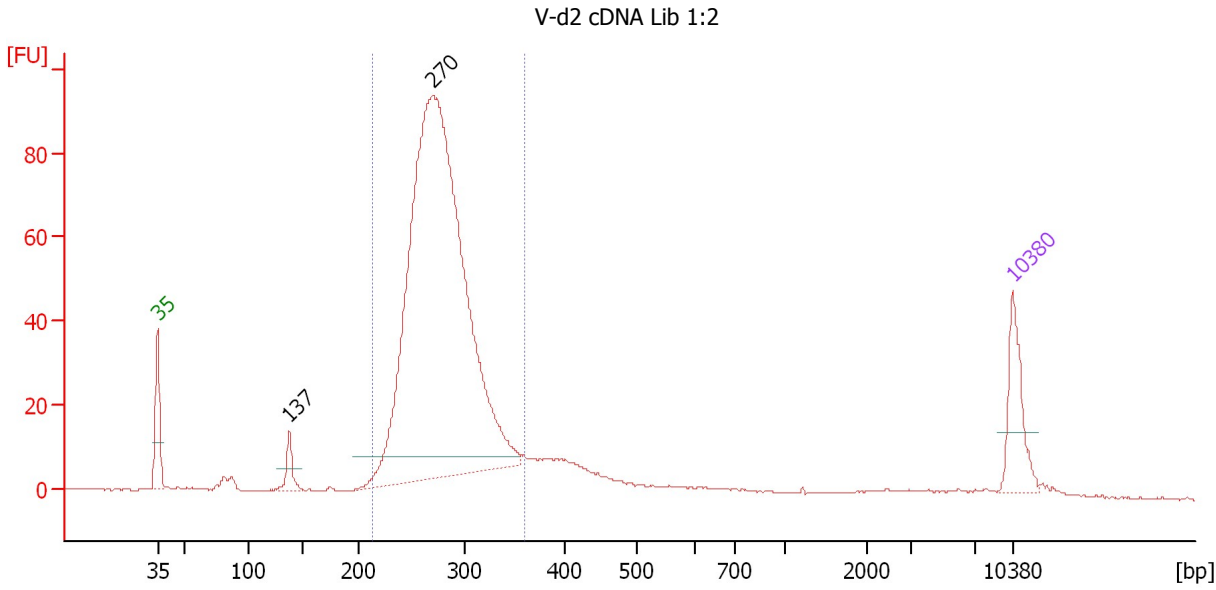
**Region table for sample 8 : V-d1 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
206	341	265	6,094.5	1,062.92	720.2	87	8.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : V-d2 cDNA Lib 1:2**

Number of peaks found: 2                      Corr. Area 1: 798.6  
 Noise: 0.1

**Peak table for sample 9 : V-d2 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	137	37.46	413.7	
3	270	1,715.74	9,613.9	
4	10,380	75.00	10.9	Upper Marker

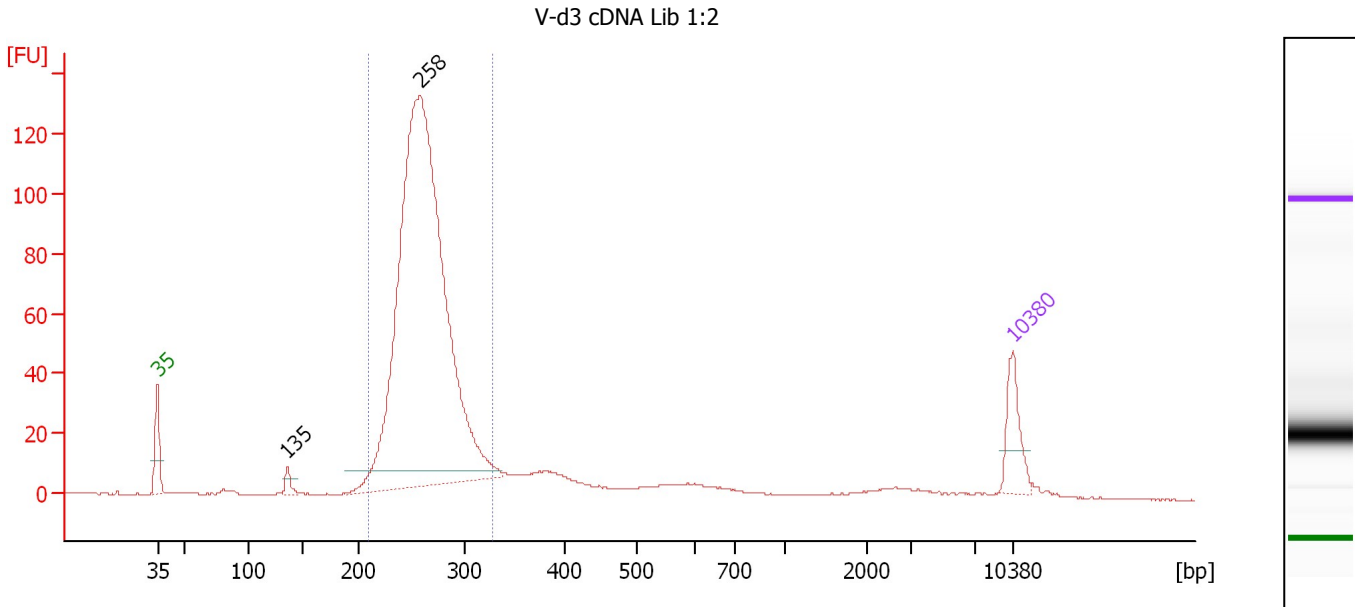
**Region table for sample 9 : V-d2 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
213	359	278	10,192.8	1,855.81	798.6	85	9.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : V-d3 cDNA Lib 1:2**

Number of peaks found: 2                      Corr. Area 1: 917.5  
 Noise: 0.1

**Peak table for sample 10 : V-d3 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	135	25.20	281.9	
3	258	2,126.87	12,469.0	
4	10,380	75.00	10.9	Upper Marker

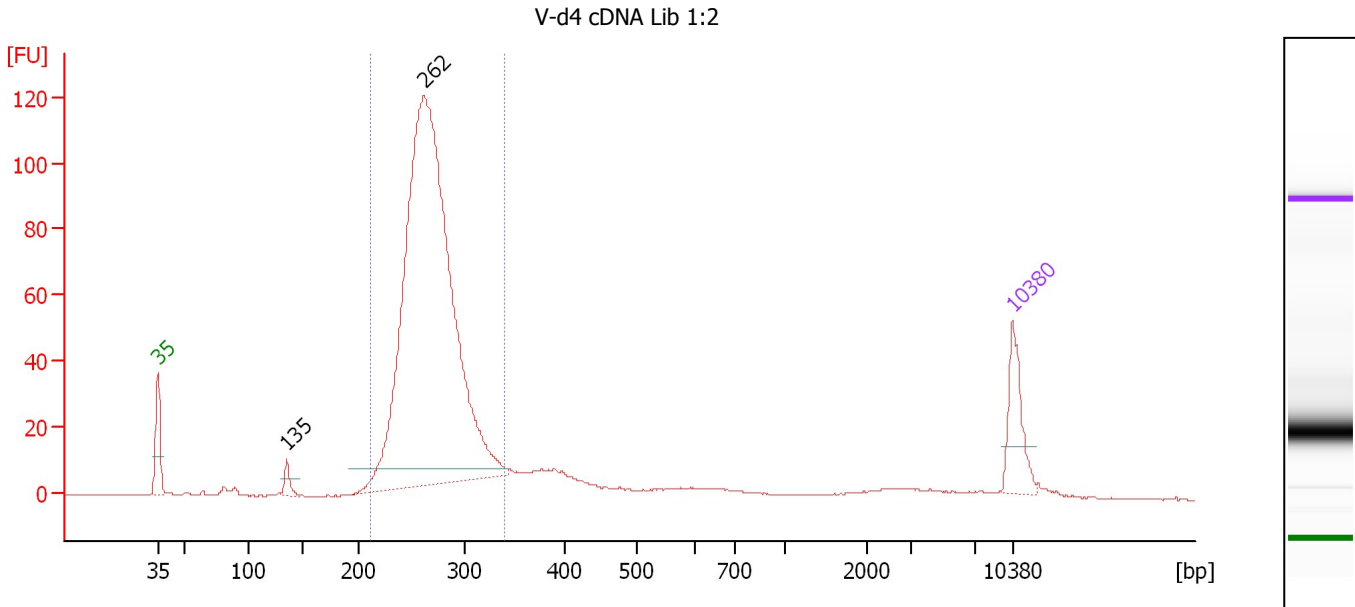
**Region table for sample 10 : V-d3 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
209	327	262	12,887.2	2,224.17	917.5	82	8.4	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : V-d4 cDNA Lib 1:2**

Number of peaks found: 2                      Corr. Area 1: 847.0  
 Noise: 0.1

**Peak table for sample 11 : V-d4 cDNA Lib 1:2**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	135	27.05	303.3	
3	262	1,773.12	10,264.2	
4	10,380	75.00	10.9	Upper Marker

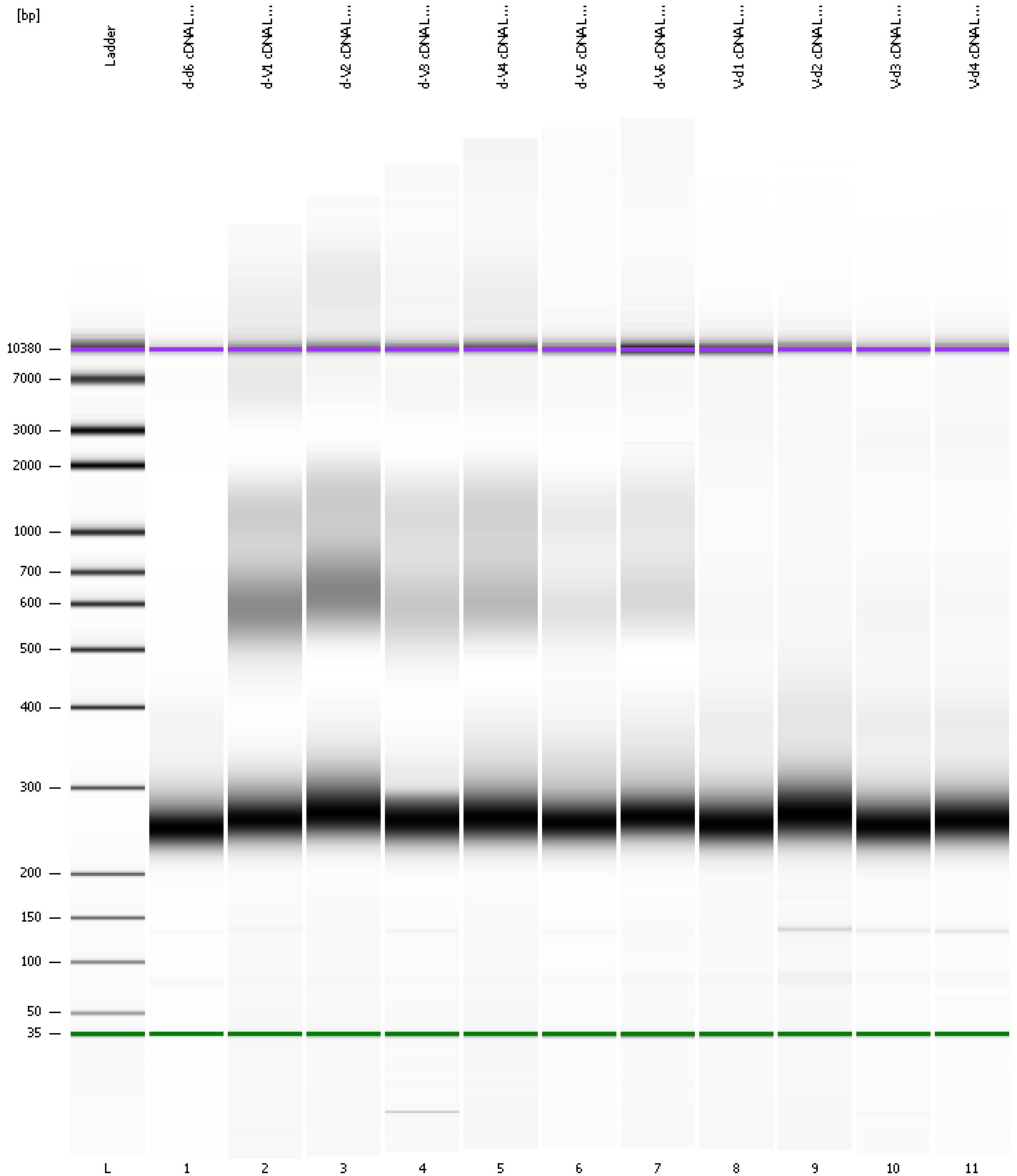
**Region table for sample 11 : V-d4 cDNA Lib 1:2**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
212	339	269	10,586.4	1,868.25	847.0	84	8.7	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
Modified: 2/19/2013 4:56:48 PM

**Gel Image**





Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19\_004.xad

Created: 2/19/2013 4:14:47 PM  
 Modified: 2/19/2013 4:56:48 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		2/19/2013 4:56:06 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-02-19\2013-02-19_004.xad)		Instrument	Run		2/19/2013 4:14:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/19/2013 4:14:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/19/2013 4:14:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/19/2013 4:14:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/19/2013 4:14:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/19/2013 4:14:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/19/2013 4:14:53 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1