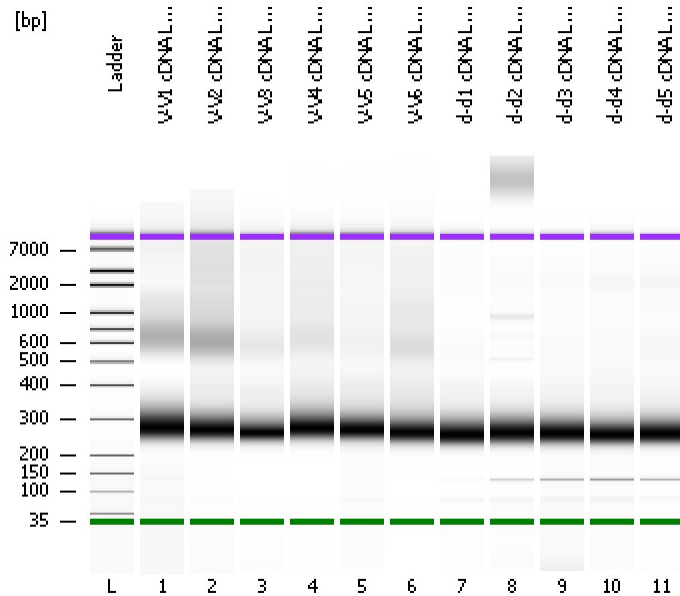


Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
Modified: 2/19/2013 2:12:11 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

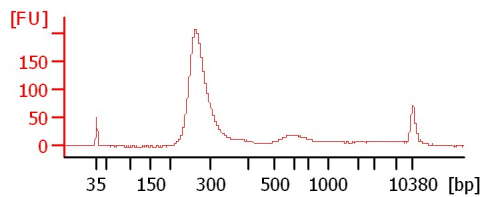
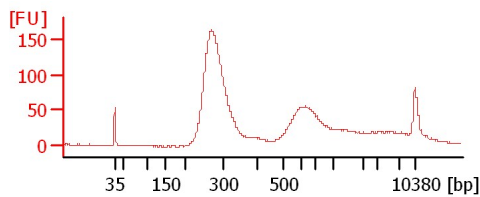
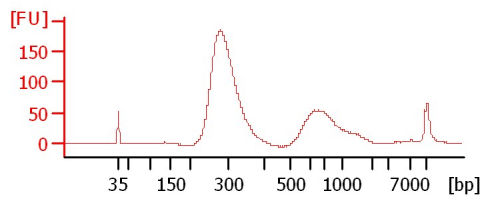
Chip Information:

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

V-V1 cDNA Lib 1:2

V-V2 cDNA Lib 1:2

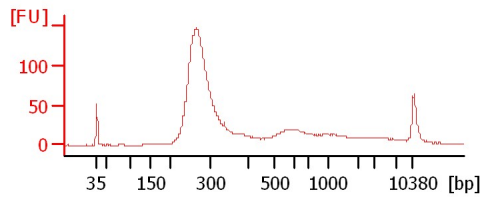
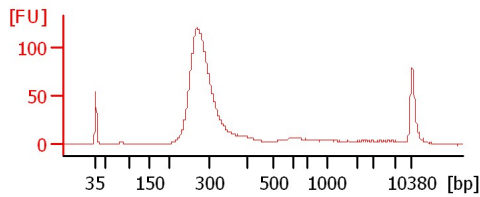
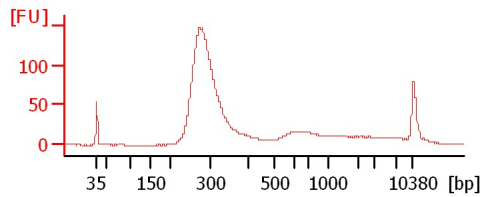
V-V3 cDNA Lib 1:2



V-V4 cDNA Lib 1:2

V-V5 cDNA Lib 1:2

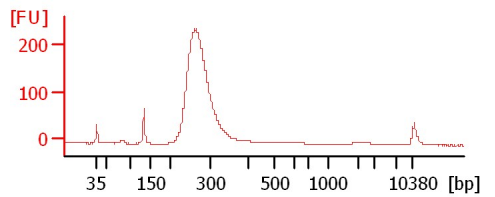
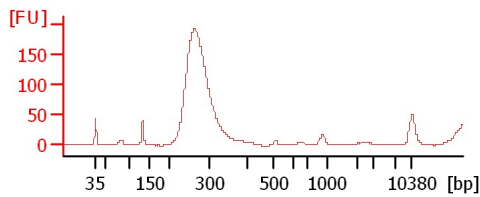
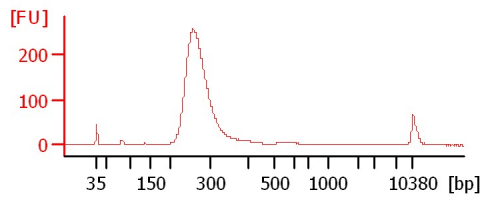
V-V6 cDNA Lib 1:2



d-d1 cDNA Lib 1:2

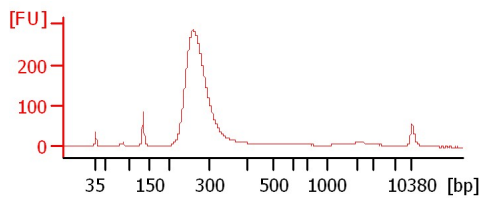
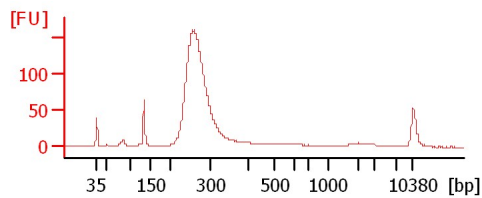
d-d2 cDNA Lib 1:2

d-d3 cDNA Lib 1:2



d-d4 cDNA Lib 1:2

d-d5 cDNA Lib 1:2



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
V-V1 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-V2 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-V3 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-V4 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-V5 cDNA Lib 1:2		<input type="checkbox"/>	✓			
V-V6 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-d1 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-d2 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-d3 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-d4 cDNA Lib 1:2		<input type="checkbox"/>	✓			
d-d5 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_001.xad

Created: 2/19/2013 1:28:07 PM
Modified: 2/19/2013 2:12:11 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

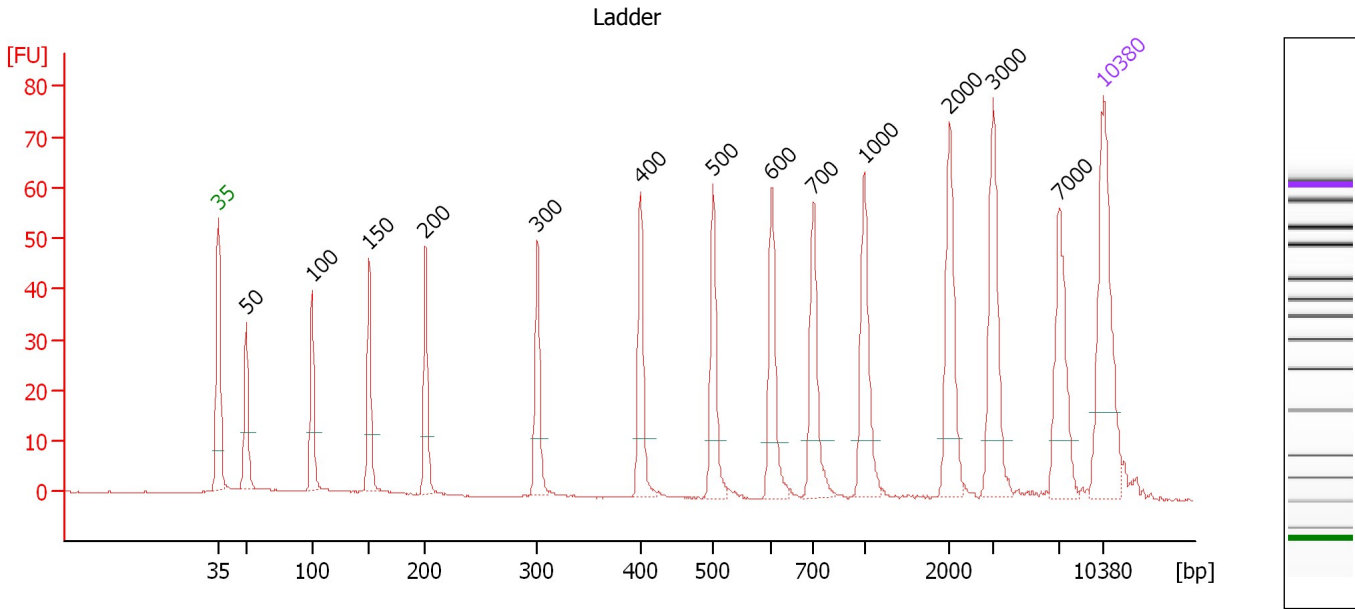
Ladder

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:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

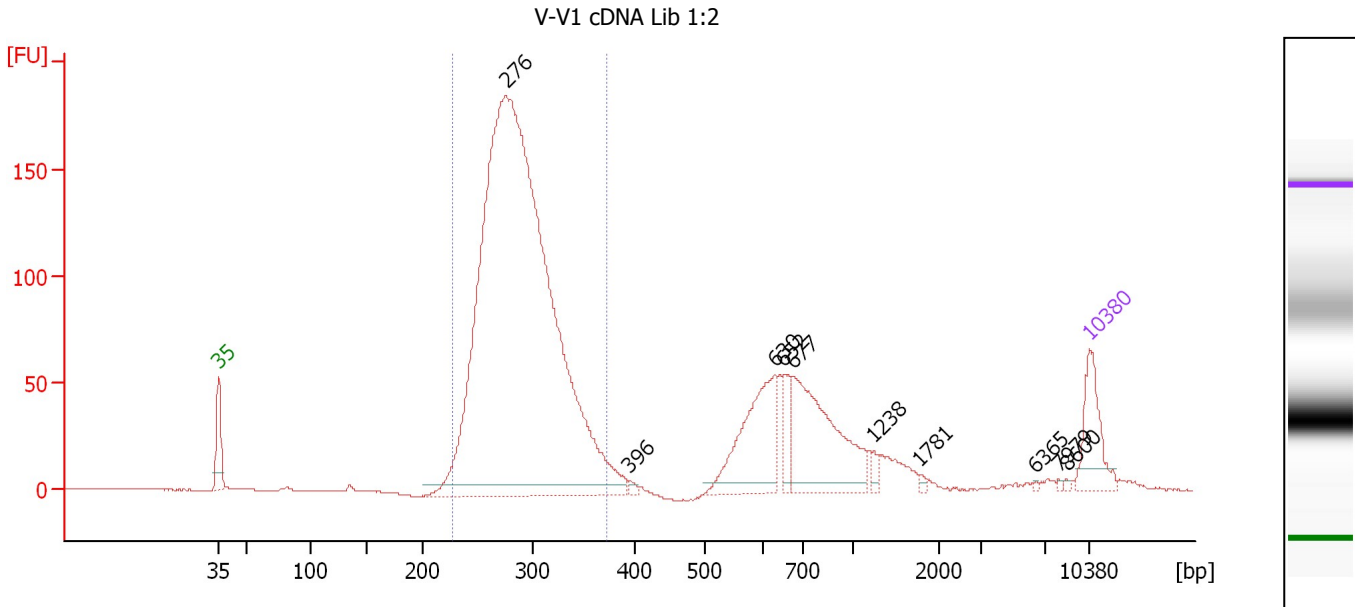
Peak table for Ladder

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:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : V-V1 cDNA Lib 1:2

Number of peaks found: 10 Corr. Area 1: 1,821.7
 Noise: 0.2

Peak table for sample 1 : V-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	276	2,621.77	14,384.9	
3	396	6.39	24.5	
4	630	215.28	517.9	
5	652	45.03	104.6	
6	677	272.08	609.2	
7	1,238	12.99	15.9	
8	1,781	3.92	3.3	
9	6,365	2.05	0.5	
10	7,979	2.30	0.4	
11	8,600	2.46	0.4	
12	10,380	75.00	10.9	Upper Marker

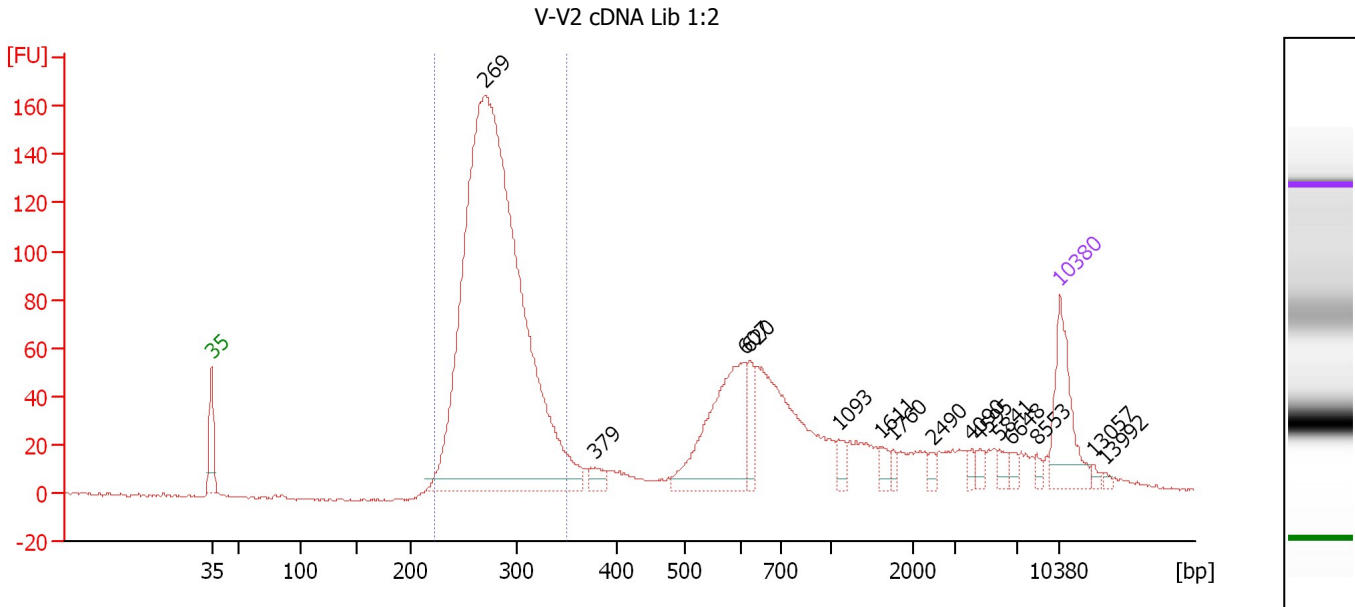
Region table for sample 1 : V-V1 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
227	374	289	12,866.7	2,426.15	1,821.7	74	10.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : V-V2 cDNA Lib 1:2

Number of peaks found: 15 Corr. Area 1: 1,397.1
 Noise: 0.4

Peak table for sample 2 : V-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	1,602.01	9,019.2	
3	379	18.33	73.3	
4	607	197.14	492.2	
5	620	33.27	81.3	
6	1,093	16.12	22.3	
7	1,611	12.16	11.4	
8	1,760	6.86	5.9	
9	2,490	7.59	4.6	
10	4,090	7.45	2.8	
11	4,595	9.89	3.3	
12	5,841	9.97	2.6	
13	6,648	7.37	1.7	
14	8,553	6.04	1.1	
15	10,380	75.00	10.9	Upper Marker
16	13,057	0.00	0.0	
17	13,992	0.00	0.0	

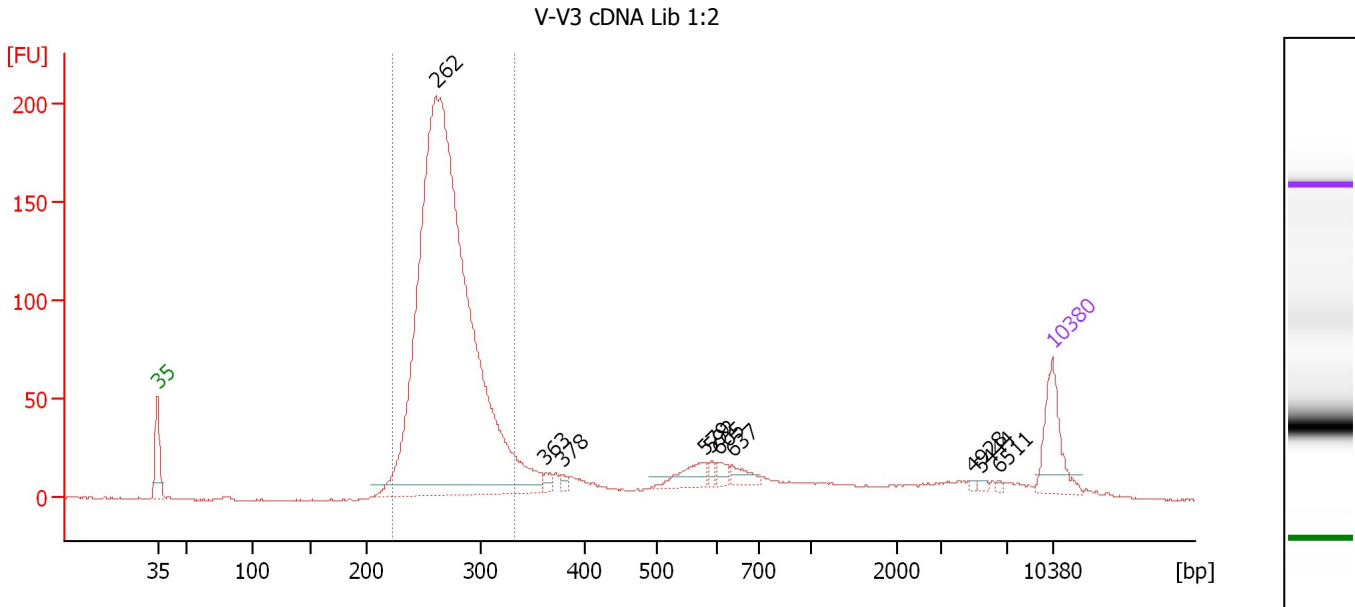
Region table for sample 2 : V-V2 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
224	351	280	8,362.3	1,534.43	1,397.1	60	9.1	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : V-V3 cDNA Lib 1:2

Number of peaks found: 10 Corr. Area 1: 1,457.3
 Noise: 0.3

Peak table for sample 3 : V-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	2,153.05	12,444.7	
3	363	11.81	49.3	
4	378	8.47	33.9	
5	579	40.43	105.7	
6	592	9.38	24.0	
7	605	12.46	31.2	
8	637	21.44	51.0	
9	4,928	2.52	0.8	
10	5,444	4.07	1.1	
11	6,511	2.80	0.7	
12	10,380	75.00	10.9	Upper Marker

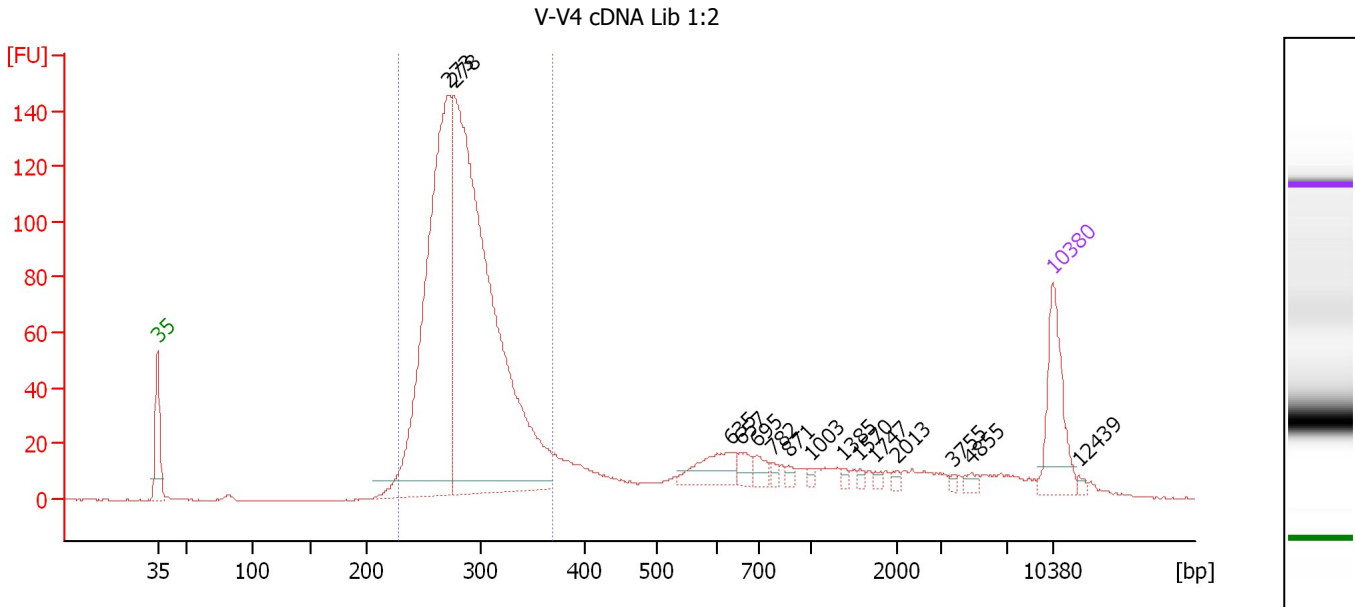
Region table for sample 3 : V-V3 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
222	334	271	11,575.3	2,063.79	1,457.3	75	8.3	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 4 : V-V4 cDNA Lib 1:2

Number of peaks found: 15 Corr. Area 1: 1,323.3
 Noise: 0.2

Peak table for sample 4 : V-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	273	686.62	3,813.6	
3	278	1,038.28	5,668.8	
4	635	49.29	117.6	
5	657	16.80	38.7	
6	695	15.30	33.3	
7	782	5.86	11.4	
8	871	6.27	10.9	
9	1,003	4.64	7.0	
10	1,385	4.00	4.4	
11	1,570	3.71	3.6	
12	1,747	3.92	3.4	
13	2,013	4.69	3.5	
14	3,755	3.43	1.4	
15	4,855	6.31	2.0	
16	10,380	75.00	10.9	Upper Marker
17	12,439	0.00	0.0	

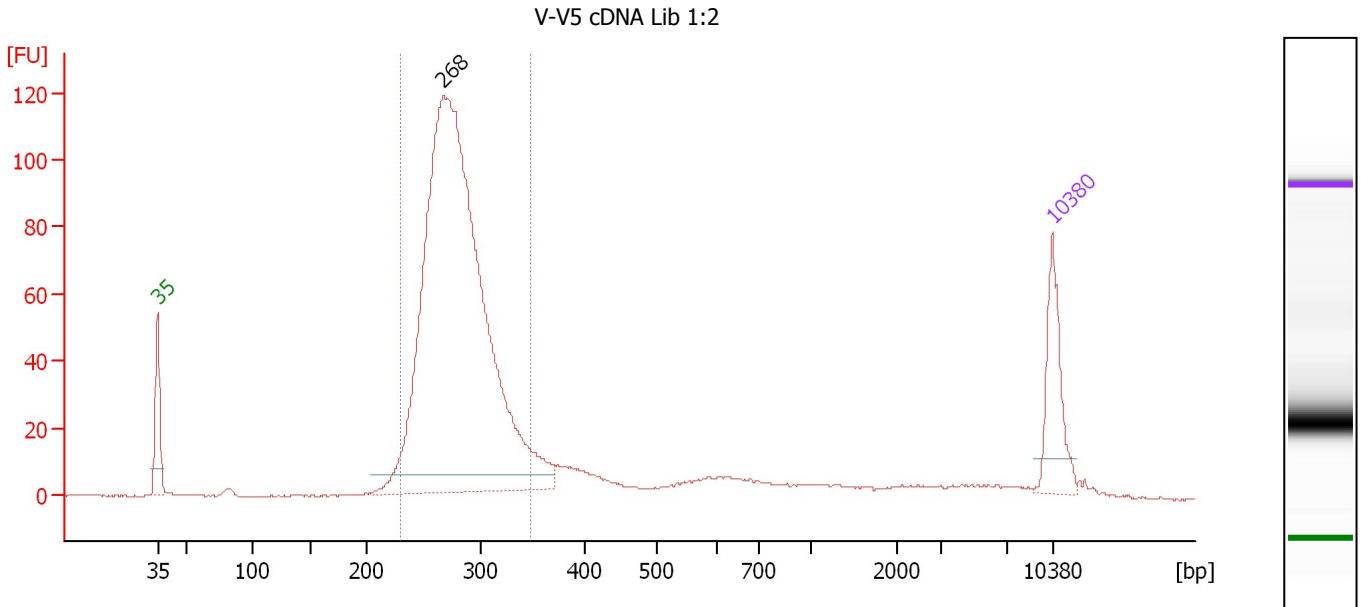
Region table for sample 4 : V-V4 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
227	369	288	9,163.6	1,720.50	1,323.3	73	10.2	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : V-V5 cDNA Lib 1:2

Number of peaks found: 1 Corr. Area 1: 974.2
 Noise: 0.2

Peak table for sample 5 : V-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	268	1,451.75	8,221.3	
3	10,380	75.00	10.9	Upper Marker

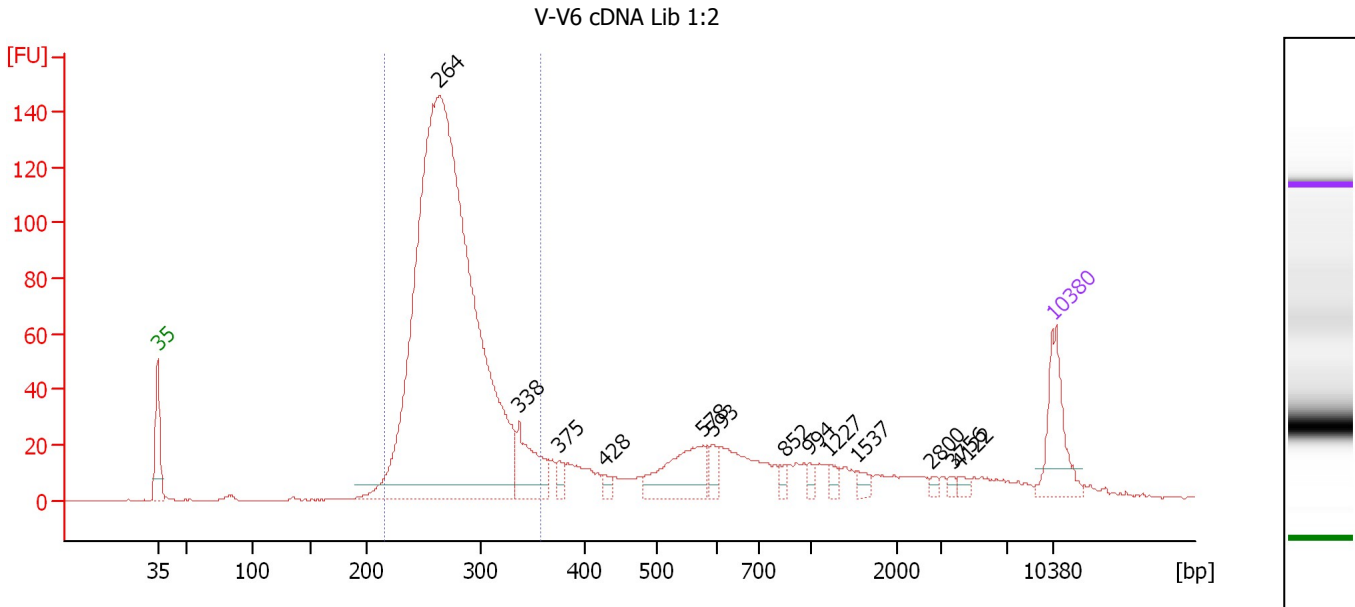
Region table for sample 5 : V-V5 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
230	349	280	7,563.1	1,388.64	974.2	79	8.9	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 6 : V-V6 cDNA Lib 1:2

Number of peaks found: 13 Corr. Area 1: 1,241.2
 Noise: 0.2

Peak table for sample 6 : V-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	264	1,899.84	10,904.3	
3	338	99.74	447.7	
4	375	16.66	67.2	
5	428	11.61	41.2	
6	578	104.74	274.6	
7	593	22.29	57.0	
8	852	11.16	19.8	
9	994	10.00	15.2	
10	1,227	12.17	15.0	
11	1,537	11.62	11.5	
12	2,800	5.80	3.1	
13	3,756	5.44	2.2	
14	4,122	6.98	2.6	
15	10,380	75.00	10.9	Upper Marker

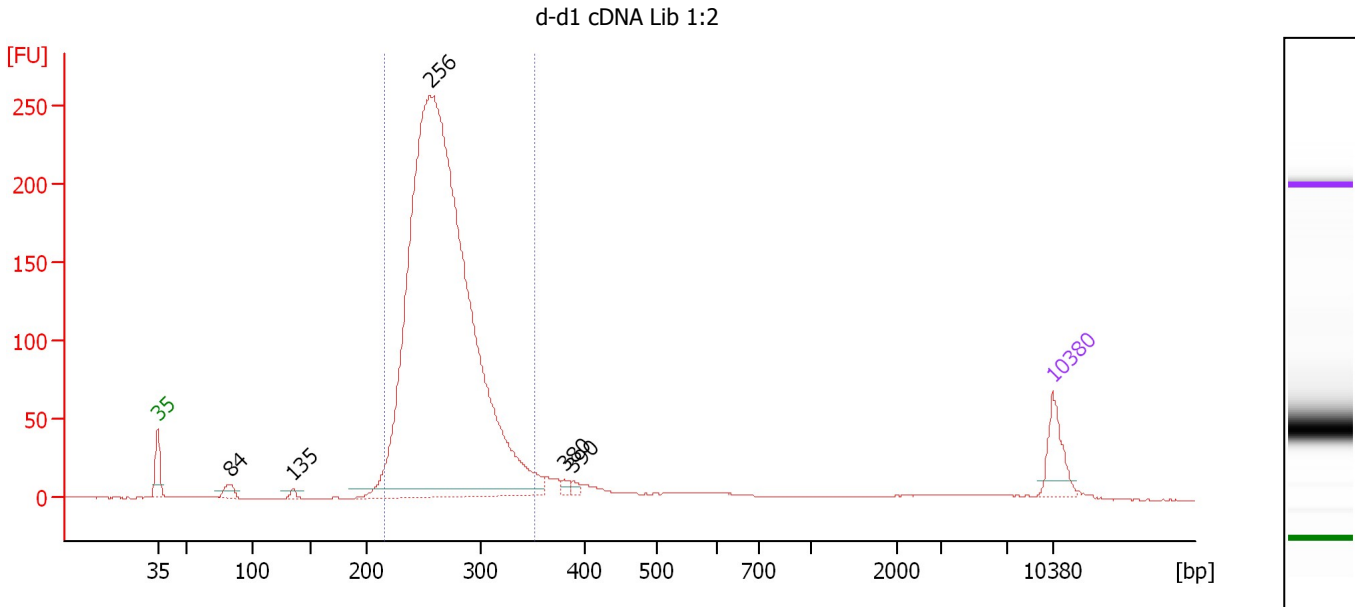
Region table for sample 6 : V-V6 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
217	359	275	10,808.9	1,946.39	1,241.2	70	10.4	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : d-d1 cDNA Lib 1:2

Number of peaks found: 5 Corr. Area 1: 2,186.6
 Noise: 0.2

Peak table for sample 7 : d-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	84	34.95	633.0	
3	135	12.87	144.1	
4	256	3,721.53	22,029.6	
5	380	12.17	48.5	
6	390	12.36	48.1	
7	10,380	75.00	10.9	Upper Marker

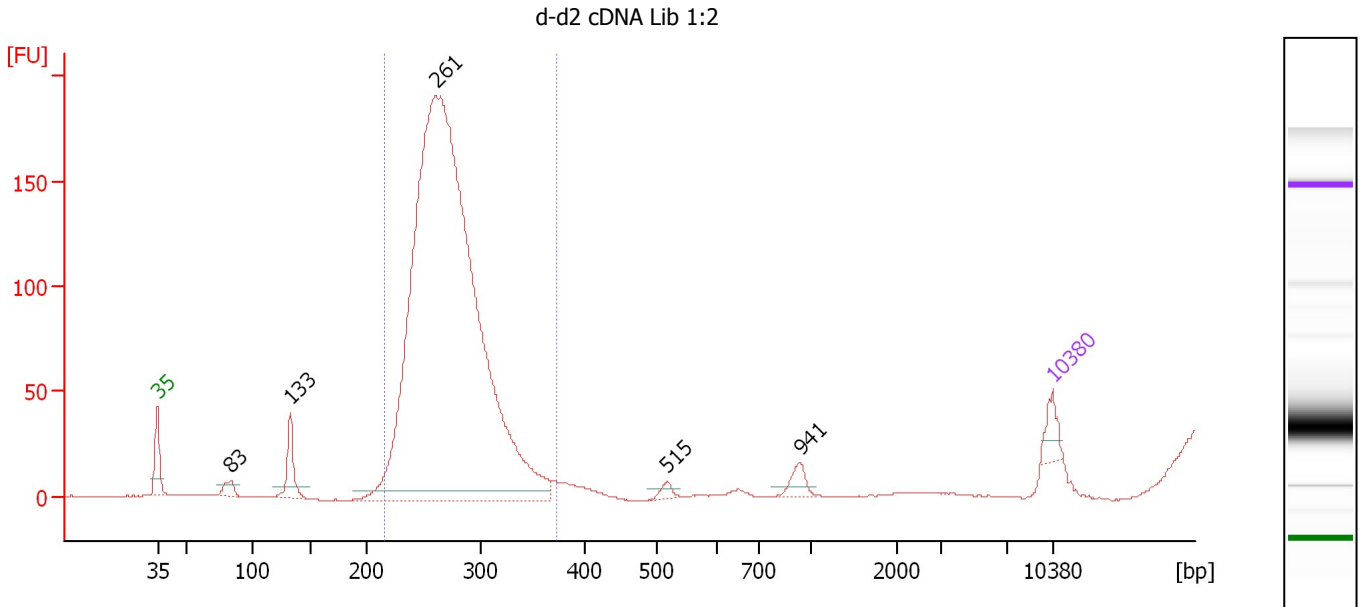
Region table for sample 7 : d-d1 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
215	353	268	20,458.3	3,597.83	2,186.6	90	10.0	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : d-d2 cDNA Lib 1:2

Number of peaks found: 5 Corr. Area 1: 1,580.2
 Noise: 0.3

Peak table for sample 8 : d-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	83	73.65	1,337.2	
3	133	215.13	2,453.6	
4	261	7,303.36	42,388.0	
5	515	35.41	104.1	
6	941	70.68	113.8	
7	10,380	75.00	10.9	Upper Marker

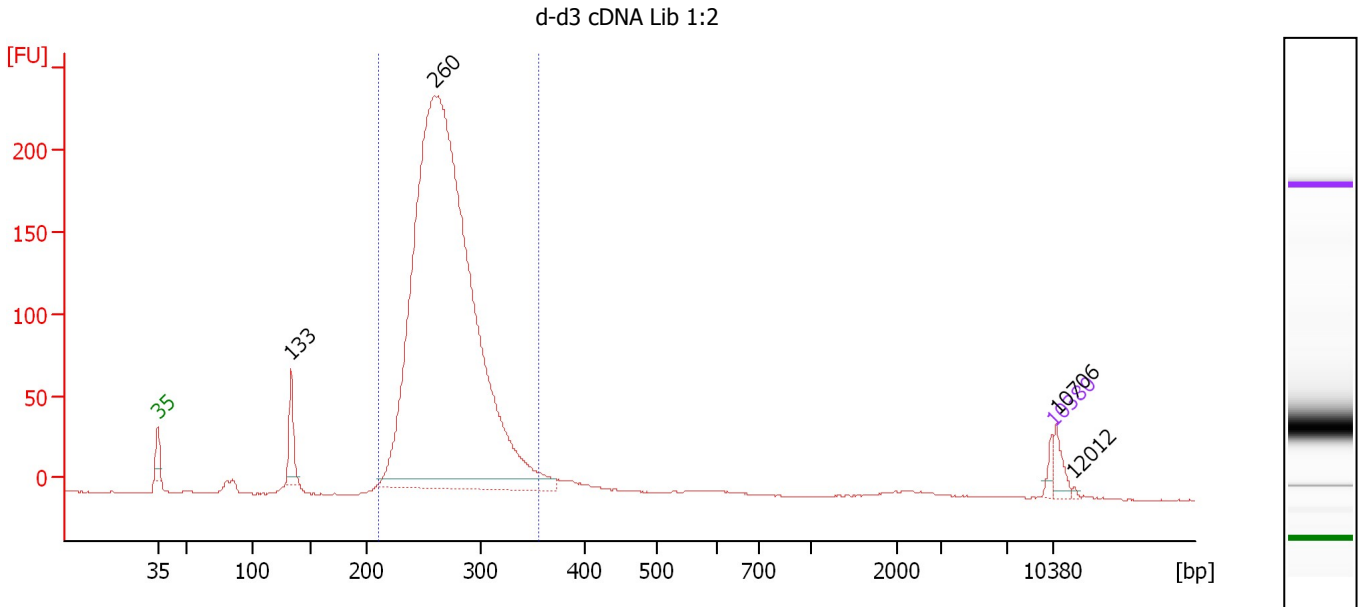
Region table for sample 8 : d-d2 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
216	374	272	36,494.0	6,497.10	1,580.2	90	9.6	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : d-d3 cDNA Lib 1:2

Number of peaks found: 4 Corr. Area 1: 1,957.7
 Noise: 0.3

Peak table for sample 9 : d-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	133	545.47	6,199.6	
3	260	16,673.90	97,162.3	
4	10,380	75.00	10.9	Upper Marker
5	10,706	0.00	0.0	
6	12,012	0.00	0.0	

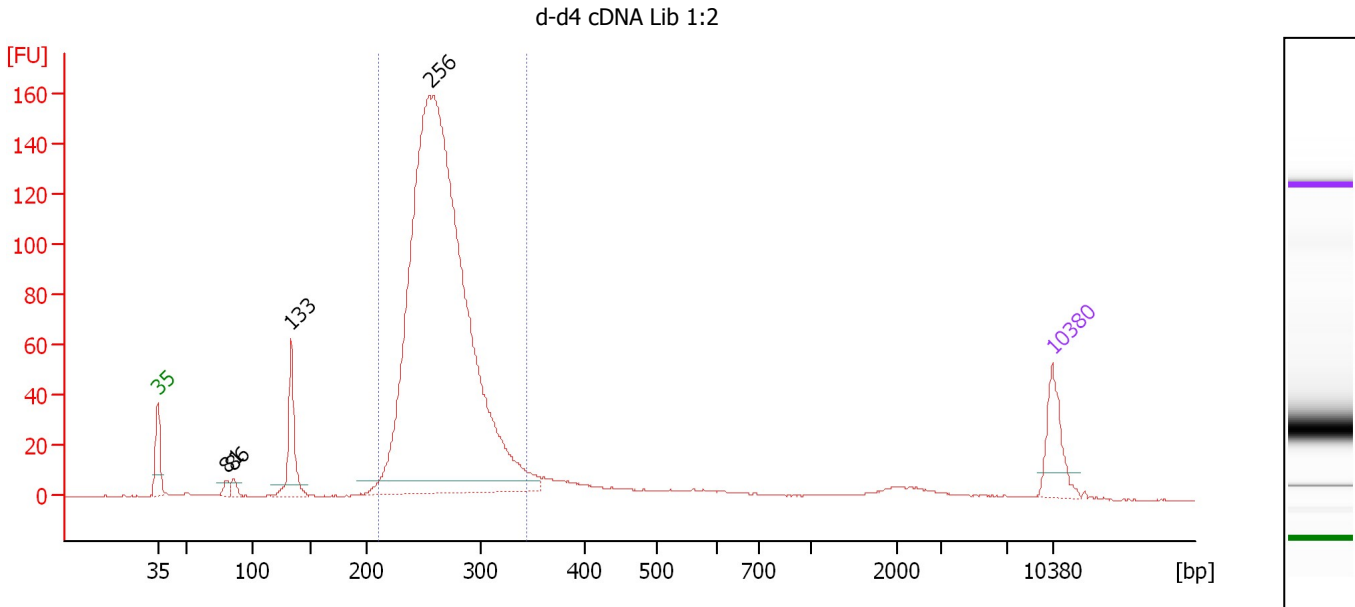
Region table for sample 9 : d-d3 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
210	356	271	90,722.5	16,115.42	1,957.7	93	9.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 10 : d-d4 cDNA Lib 1:2

Number of peaks found: 4 Corr. Area 1: 1,258.9
 Noise: 0.3

Peak table for sample 10 : d-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	81	17.49	328.3	
3	86	19.59	345.8	
4	133	158.11	1,797.0	
5	256	2,613.94	15,491.8	
6	10,380	75.00	10.9	Upper Marker

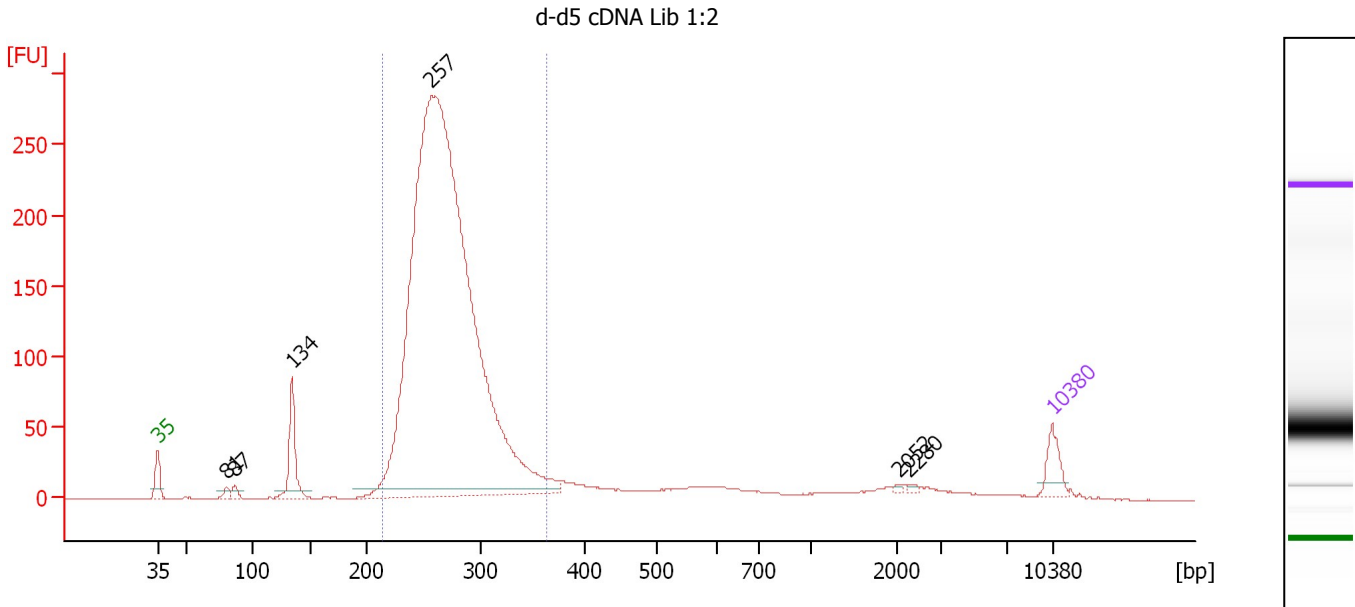
Region table for sample 10 : d-d4 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
211	344	267	14,684.9	2,570.52	1,258.9	83	9.5	Blue

Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : d-d5 cDNA Lib 1:2

Number of peaks found: 6 Corr. Area 1: 2,363.8
 Noise: 0.2

Peak table for sample 11 : d-d5 cDNA Lib 1:2

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	81	28.72	539.4	
3	87	31.04	542.3	
4	134	249.87	2,821.2	
5	257	5,886.88	34,714.3	
6	2,052	7.12	5.3	
7	2,280	9.31	6.2	
8	10,380	75.00	10.9	Upper Marker

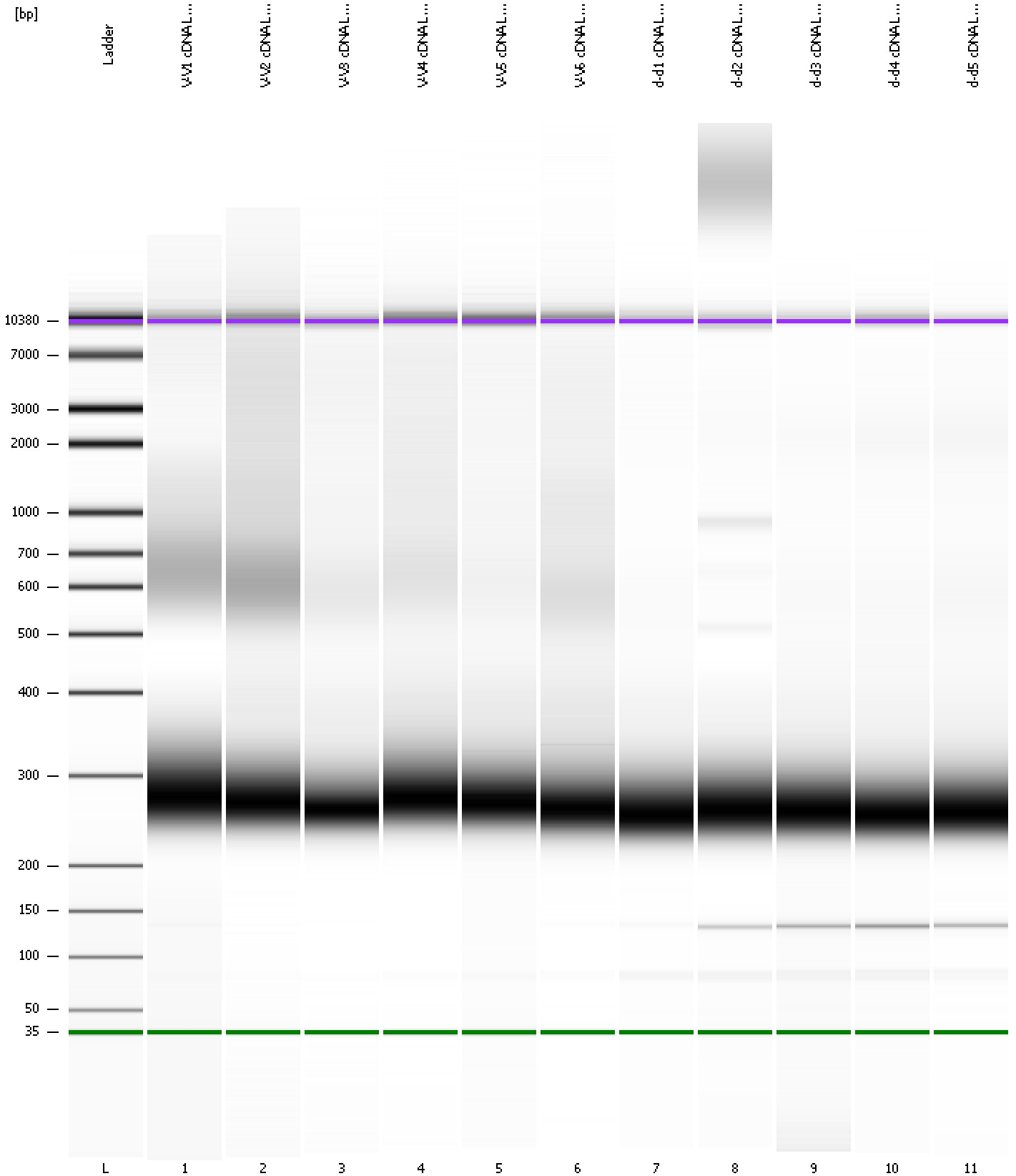
Region table for sample 11 : d-d5 cDNA Lib 1:2

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
213	364	271	32,392.4	5,746.55	2,363.8	85	10.2	Blue

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
Modified: 2/19/2013 2:12:11 PM

Gel Image



Assay Class: High Sensitivity DNA Assay
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-19\2013-02-19_001.xad

Created: 2/19/2013 1:28:07 PM
 Modified: 2/19/2013 2:12:11 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 2:09:21 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_001.xad)		Instrument	Run		2/19/2013 1:28:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/19/2013 1:28:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/19/2013 1:28:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/19/2013 1:28:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/19/2013 1:28:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/19/2013 1:28:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/19/2013 1:28:08 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1