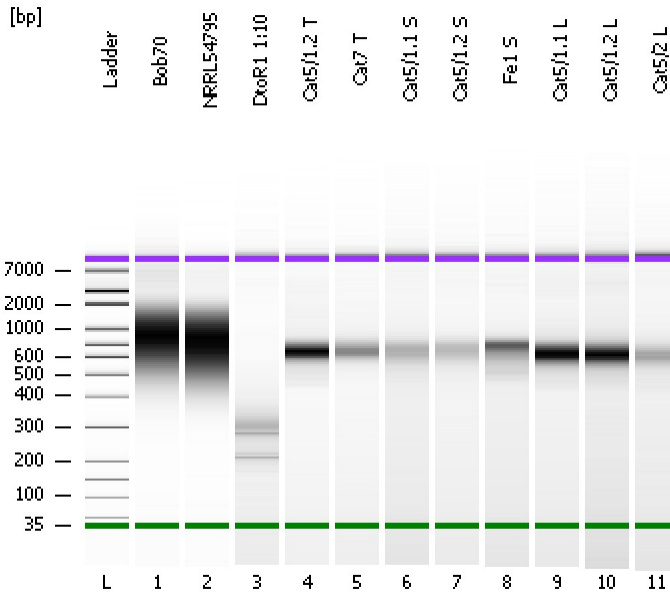


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
Modified: 5/4/2015 12:59:11 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

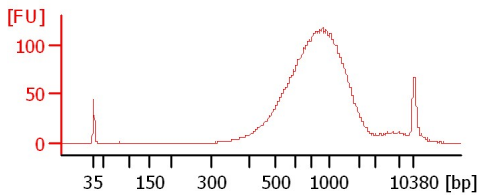
Assay Information:

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

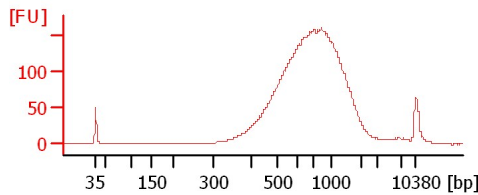
Chip Information:

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

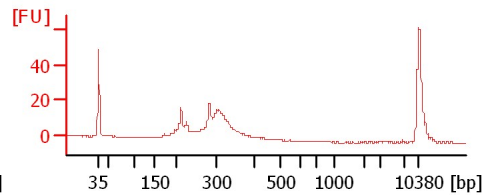
**Bob70**



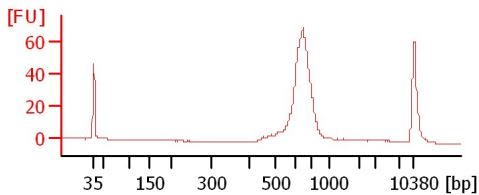
**NRRL54795**



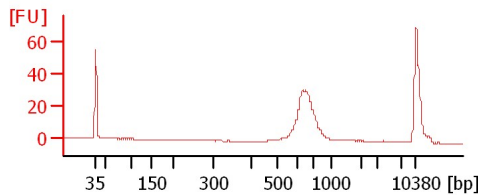
**DtoR1 1:10**



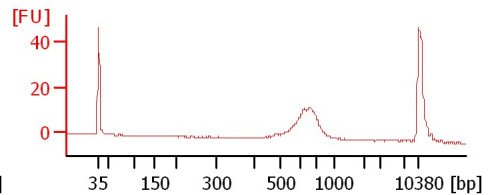
**Cat5/1.2 T**



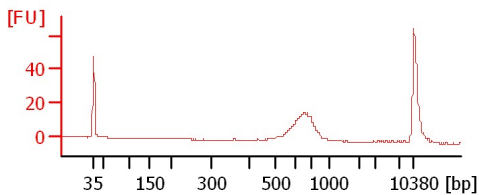
**Cat7 T**



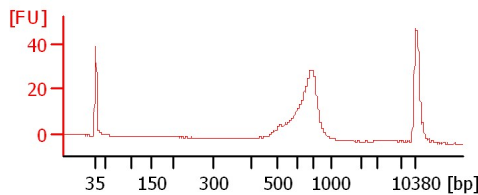
**Cat5/1.1 S**



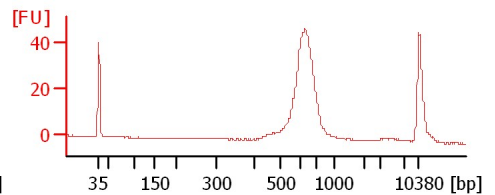
**Cat5/1.2 S**



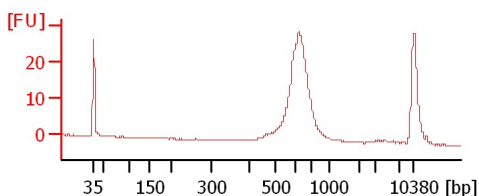
**Fe1 S**



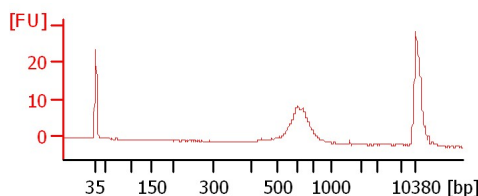
**Cat5/1.1 L**



**Cat5/1.2 L**



**Cat5/2 L**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
Modified: 5/4/2015 12:59:11 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Bob70		<input type="checkbox"/>	✓			
NRRL54795		<input type="checkbox"/>	✓			
DtoR1 1:10		<input type="checkbox"/>	✓			
Cat5/1.2 T		<input type="checkbox"/>	✓			
Cat7 T		<input type="checkbox"/>	✓			
Cat5/1.1 S		<input type="checkbox"/>	✓			
Cat5/1.2 S		<input type="checkbox"/>	✓			
Fe1 S		<input type="checkbox"/>	✓			
Cat5/1.1 L		<input type="checkbox"/>	✓			
Cat5/1.2 L		<input type="checkbox"/>	✓			
Cat5/2 L		<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\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
Modified: 5/4/2015 12:59:11 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/ $\mu$ 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

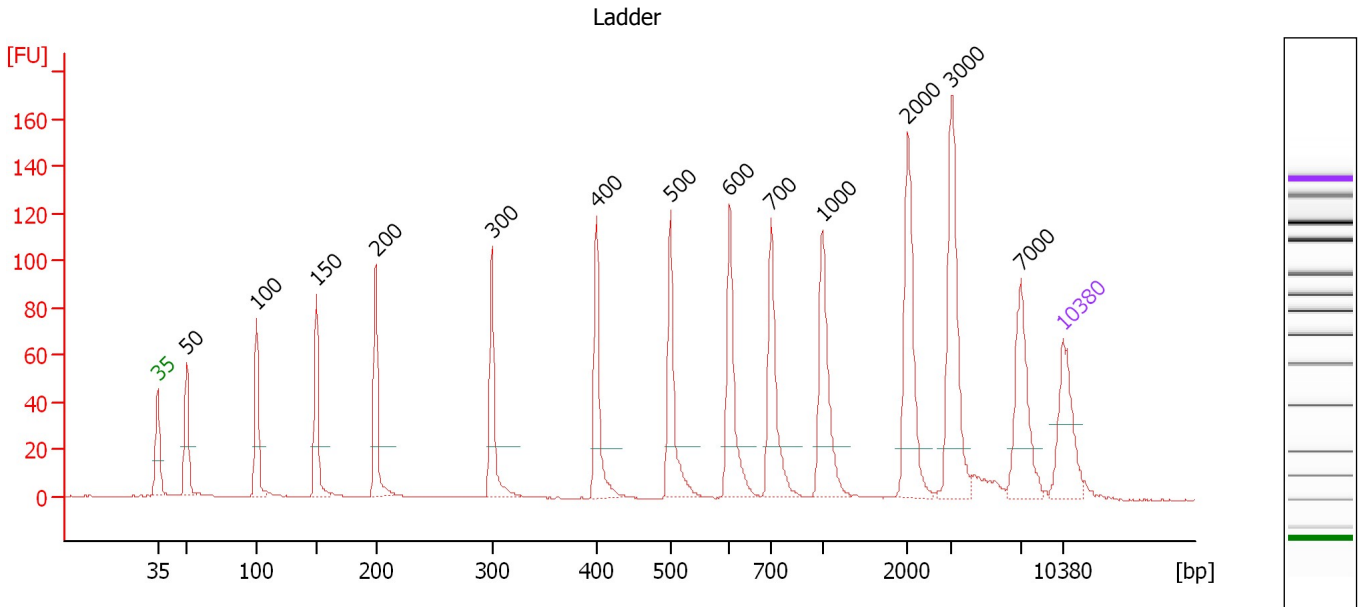
**Ladder**

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\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

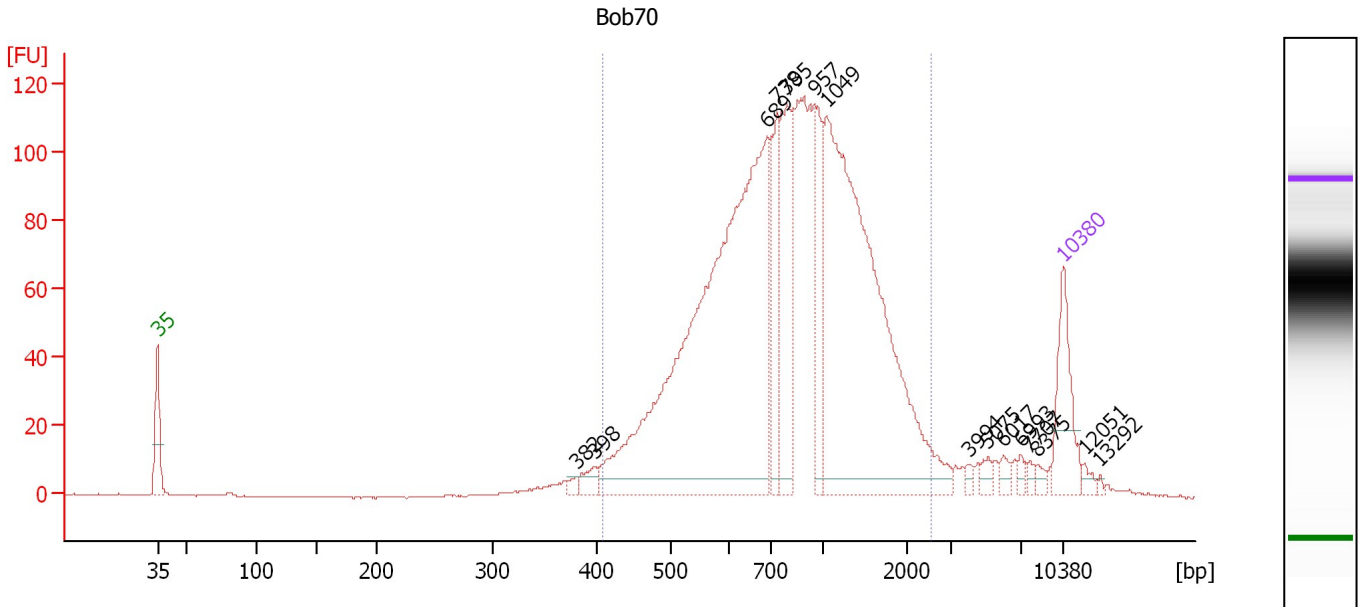
**Peak table for Ladder**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.27
3	100	150.00	2,272.7	Ladder Peak	50.65
4	150	150.00	1,515.2	Ladder Peak	55.28
5	200	150.00	1,136.4	Ladder Peak	59.87
6	300	150.00	757.6	Ladder Peak	68.82
7	400	150.00	568.2	Ladder Peak	76.93
8	500	150.00	454.5	Ladder Peak	82.64
9	600	150.00	378.8	Ladder Peak	87.23
10	700	150.00	324.7	Ladder Peak	90.42
11	1,000	150.00	227.3	Ladder Peak	94.36
12	2,000	150.00	113.6	Ladder Peak	100.99
13	3,000	150.00	75.8	Ladder Peak	104.38
14	7,000	150.00	32.5	Ladder Peak	109.71
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : Bob70**

Number of peaks found: 15                      Corr. Area 1: 1,875.5  
 Noise: 0.2

**Peak table for sample 1 : Bob70**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	382	8.16	32.4		75.44
3	398	20.16	76.7		76.79
4	689	1,031.03	2,266.0		90.08
5	738	115.93	238.0		90.92
6	795	187.20	357.0		91.67
7	957	99.05	156.8		93.80
8	1,049	702.05	1,014.4		94.69
9	3,994	6.05	2.3		105.70
10	5,075	10.42	3.1		107.14
11	6,017	10.13	2.6		108.40
12	6,993	7.75	1.7		109.70
13	7,707	5.81	1.1		110.40
14	8,375	7.67	1.4		111.05
15	10,380	75.00	10.9	Upper Marker	113.00
16	12,051	0.00	0.0		114.63
17	13,292	0.00	0.0		115.84

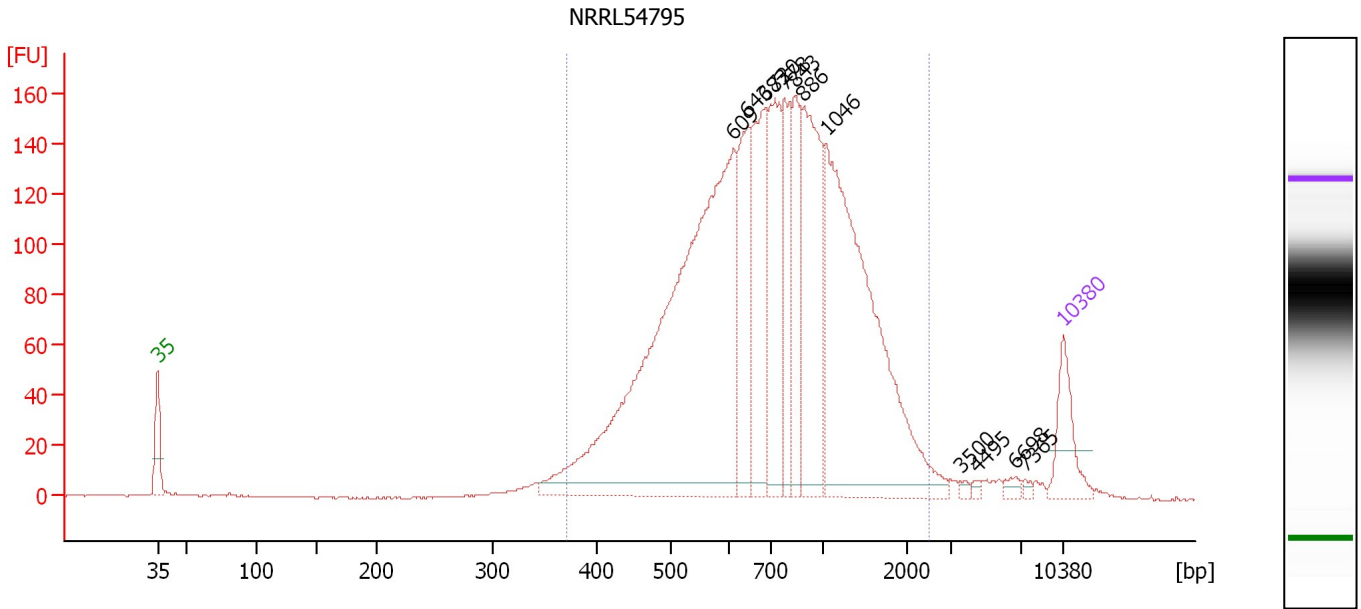
**Region table for sample 1 : Bob70**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
408	940	2,530	1,875.5	4,788.2	92	45.4	2,408.74	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : NRRL54795**

Number of peaks found: 12                      Corr. Area 1: 2,860.6  
 Noise: 0.3

**Peak table for sample 2 : NRRL54795**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	609	1,265.06	3,146.3		87.52
3	643	213.95	503.9		88.61
4	683	276.33	612.8		89.89
5	720	251.18	528.2		90.69
6	778	142.37	277.2		91.45
7	843	157.05	282.2		92.30
8	886	324.96	555.5		92.87
9	1,046	717.99	1,039.7		94.67
10	3,500	5.00	2.2		105.04
11	4,495	5.41	1.8		106.37
12	6,698	10.92	2.5		109.31
13	7,365	5.40	1.1		110.06
14	10,380	75.00	10.9	Upper Marker	113.00

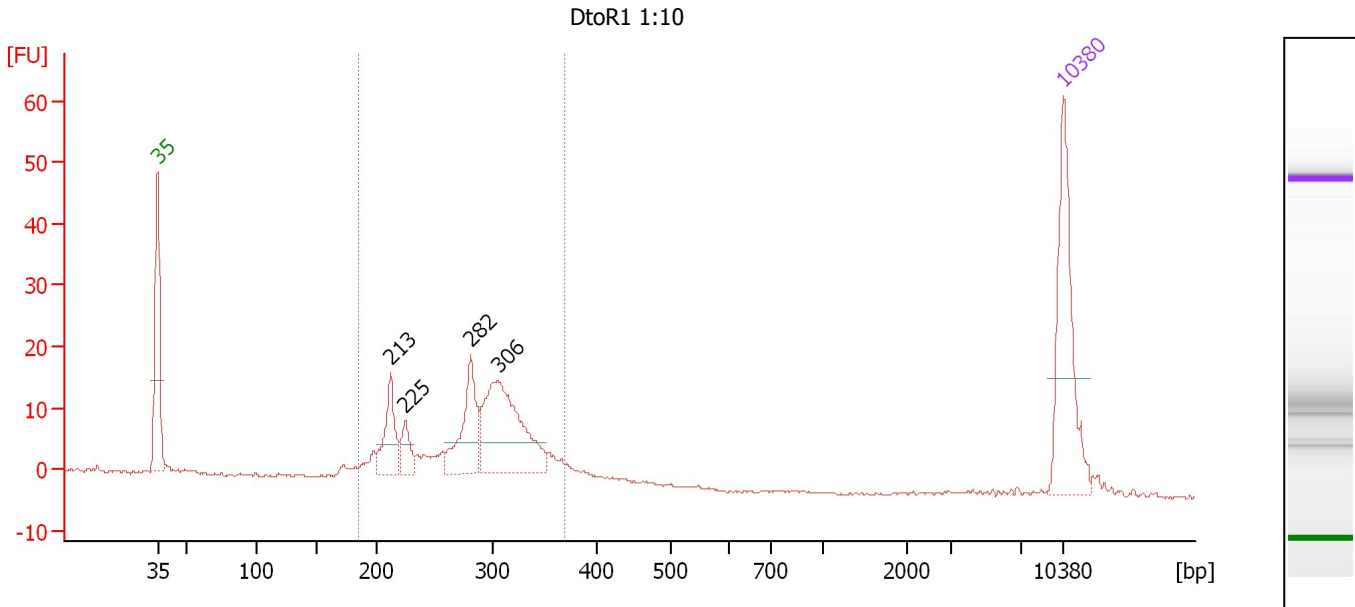
**Region table for sample 2 : NRRL54795**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
371	848	2,495	2,860.6	7,572.5	96	46.5	3,438.76	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : DtoR1 1:10**

Number of peaks found: 4                      Corr. Area 1: 196.1  
 Noise: 0.3

**Peak table for sample 3 : DtoR1 1:10**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	213	42.57	303.5		60.99
3	225	18.98	127.6		62.15
4	282	60.48	324.9		67.22
5	306	120.87	598.9		69.29
6	10,380	75.00	10.9	Upper Marker	113.00

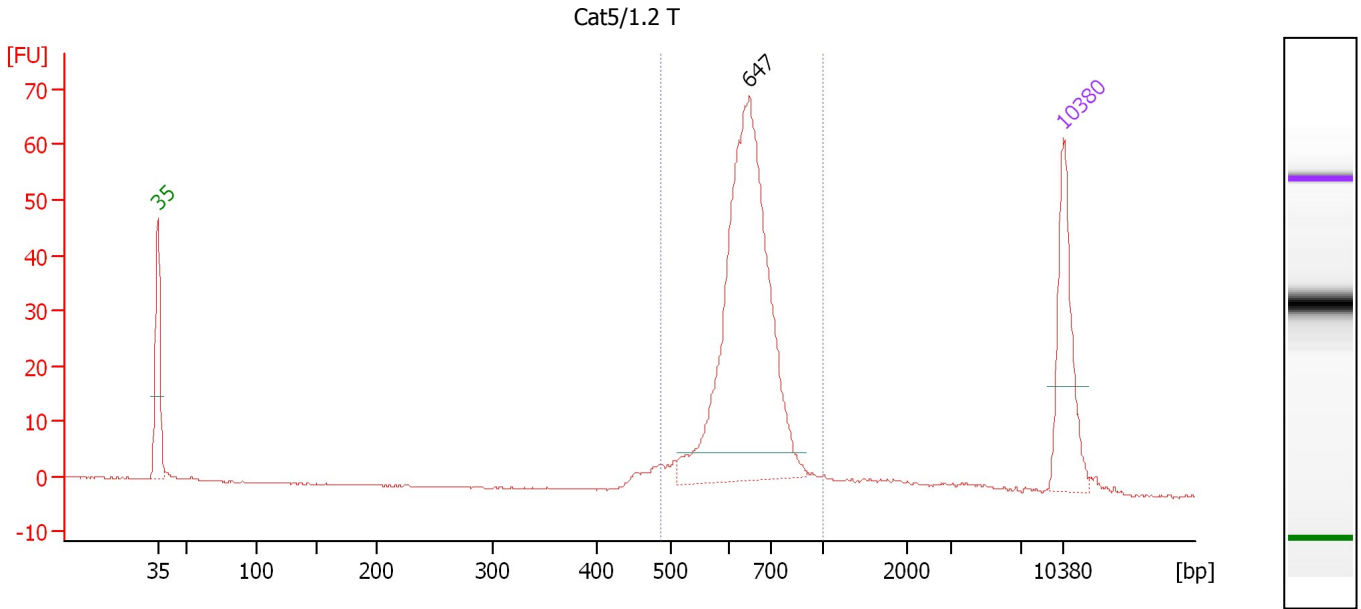
**Region table for sample 3 : DtoR1 1:10**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
185	282	370	196.1	1,820.9	86	16.1	329.45	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : Cat5/1.2 T**

Number of peaks found: 1                      Corr. Area 1: 337.6  
 Noise: 0.1

**Peak table for sample 4 : Cat5/1.2 T**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	647	427.45	1,000.9		88.73
3	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 4 : Cat5/1.2 T**

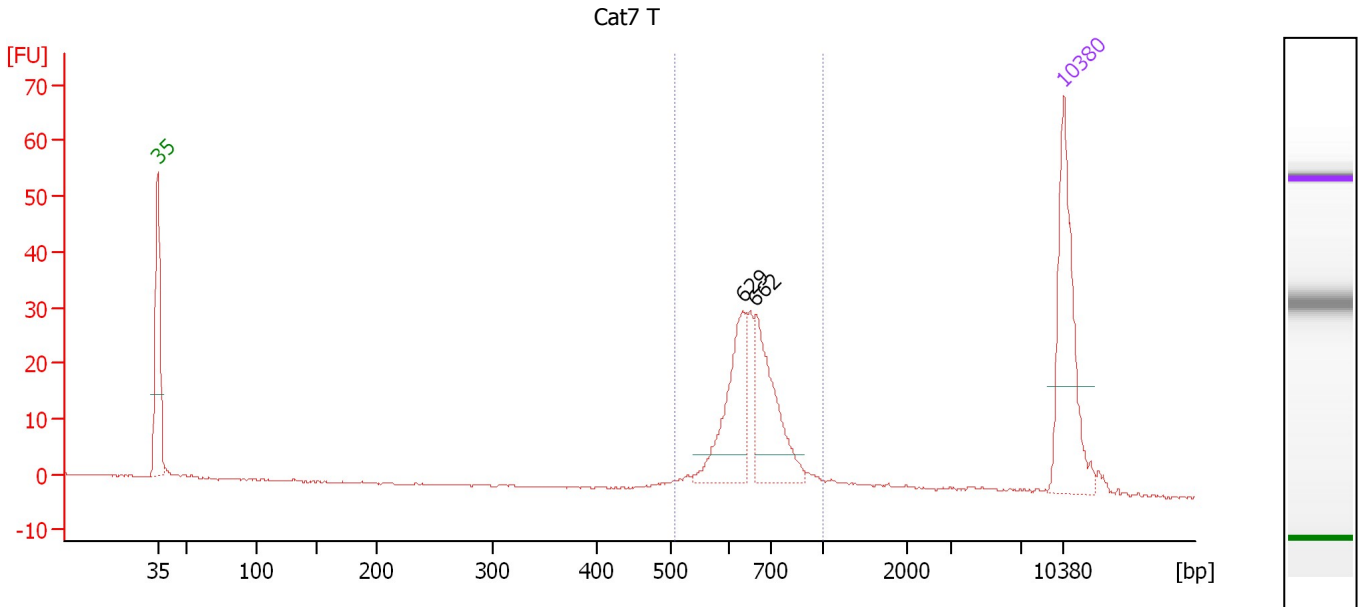
From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
487	648	1,000	337.6	1,107.3	88	11.3	467.78	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : Cat7 T**

Number of peaks found: 2                      Corr. Area 1: 162.0  
 Noise: 0.2

**Peak table for sample 5 : Cat7 T**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	629	72.86	175.4		88.16
3	662	72.53	165.9		89.22
4	10,380	75.00	10.9	Upper Marker	113.00

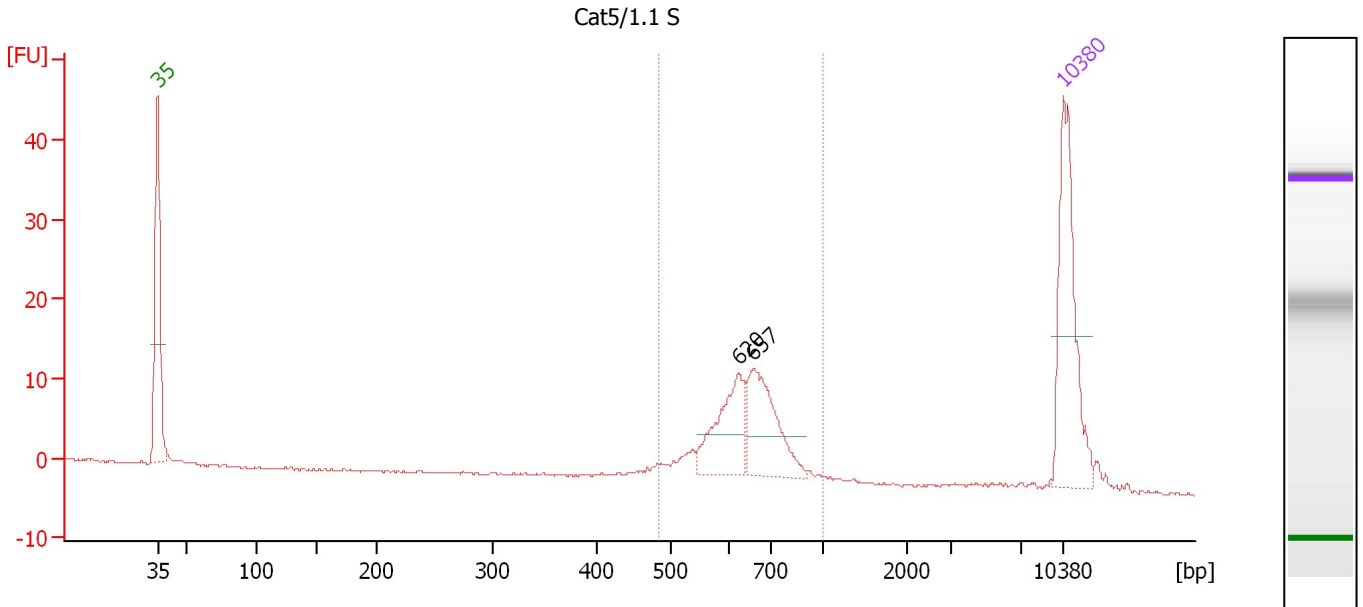
**Region table for sample 5 : Cat7 T**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
507	665	1,000	162.0	437.4	86	12.1	189.66	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : Cat5/1.1 S**

Number of peaks found: 2                      Corr. Area 1: 89.0  
 Noise: 0.2

**Peak table for sample 6 : Cat5/1.1 S**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	620	52.97	129.4		87.88
3	657	62.05	143.1		89.04
4	10,380	75.00	10.9	Upper Marker	113.00

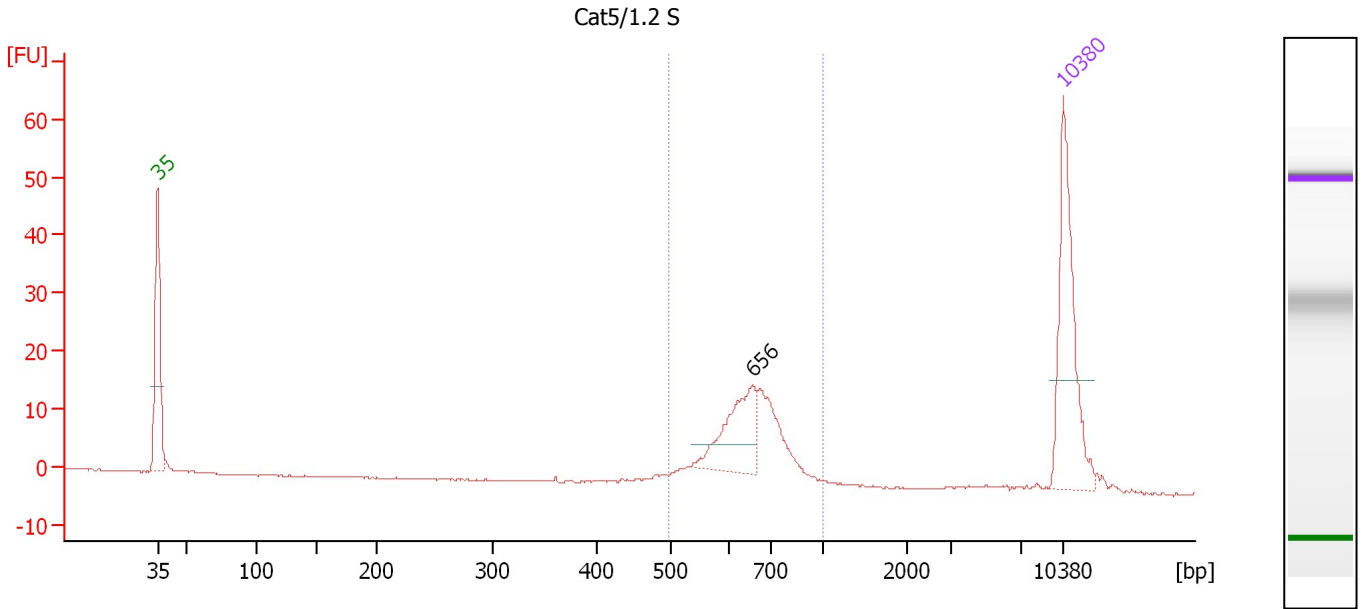
**Region table for sample 6 : Cat5/1.1 S**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
483	646	1,000	89.0	337.6	89	13.4	141.45	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 7 : Cat5/1.2 S**

Number of peaks found: 1                      Corr. Area 1: 103.2  
 Noise: 0.1

**Peak table for sample 7 : Cat5/1.2 S**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	656	58.02	134.0		89.02
3	10,380	75.00	10.9	Upper Marker	113.00

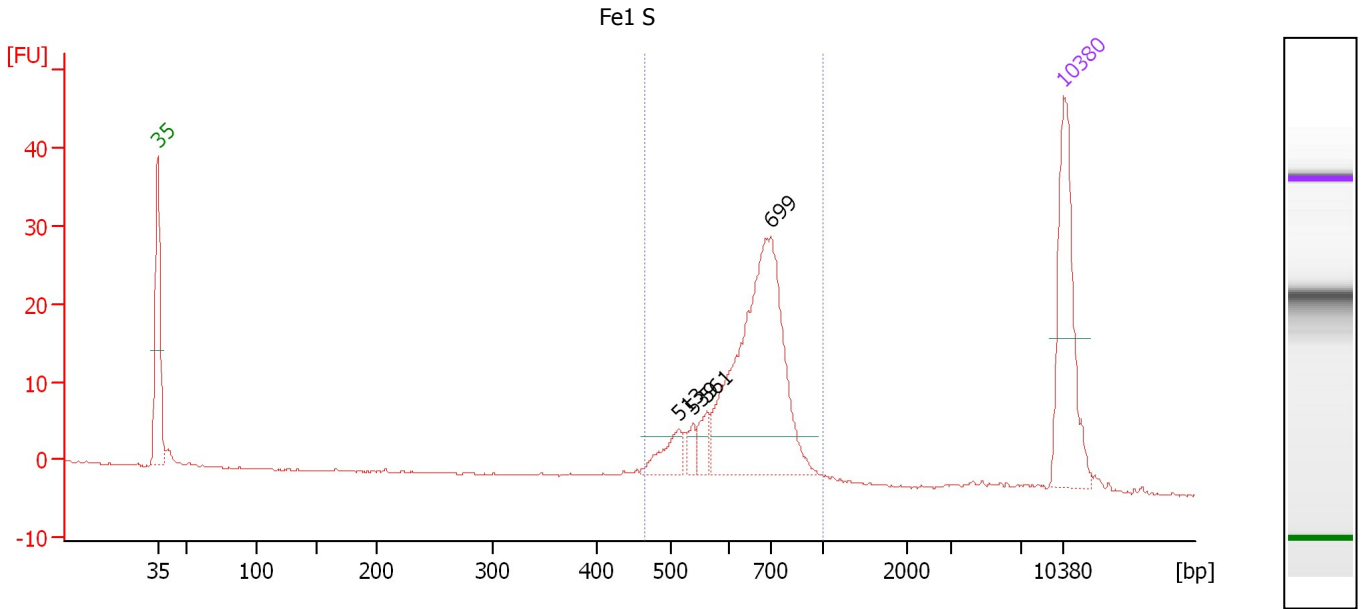
**Region table for sample 7 : Cat5/1.2 S**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
499	659	1,000	103.2	314.4	88	13.2	134.55	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 8 : Fe1 S**

Number of peaks found: 4                      Corr. Area 1: 176.6  
 Noise: 0.1

**Peak table for sample 8 : Fe1 S**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	513	22.30	65.9		83.23
3	539	9.09	25.6		84.41
4	561	13.75	37.1		85.44
5	699	227.56	493.3		90.39
6	10,380	75.00	10.9	Upper Marker	113.00

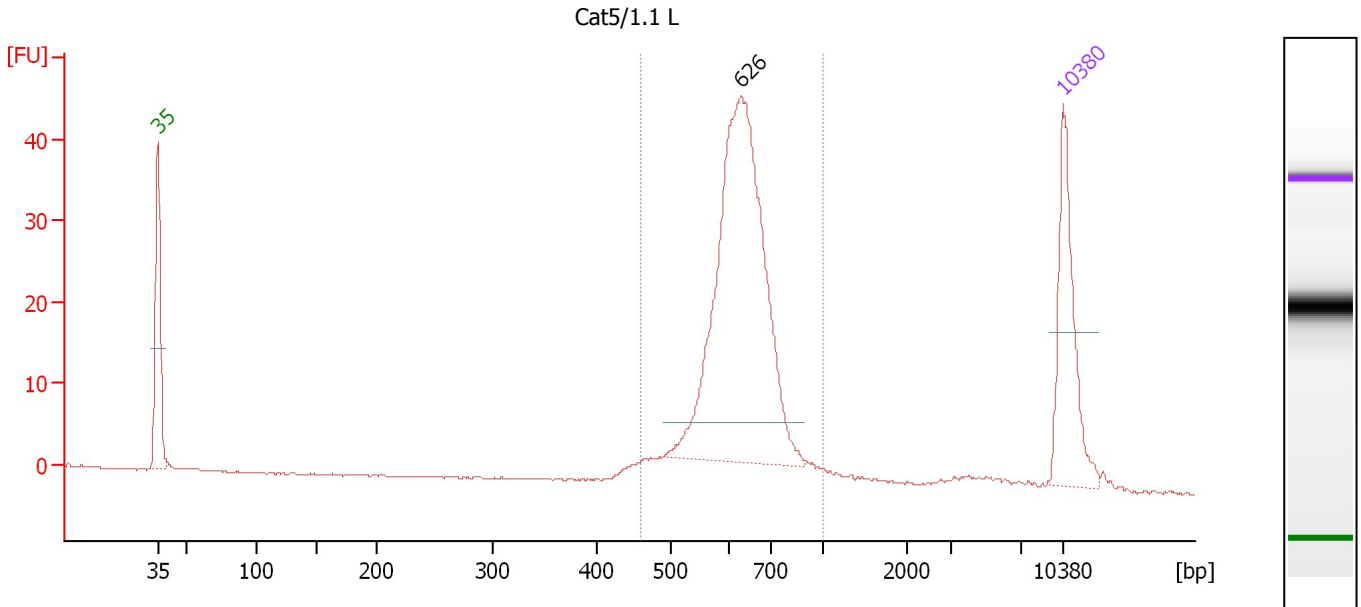
**Region table for sample 8 : Fe1 S**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
464	657	1,000	176.6	684.4	94	14.1	290.09	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 9 : Cat5/1.1 L**

Number of peaks found: 1                      Corr. Area 1: 259.5  
 Noise: 0.1

**Peak table for sample 9 : Cat5/1.1 L**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	626	384.67	930.8		88.06
3	10,380	75.00	10.9	Upper Marker	113.00

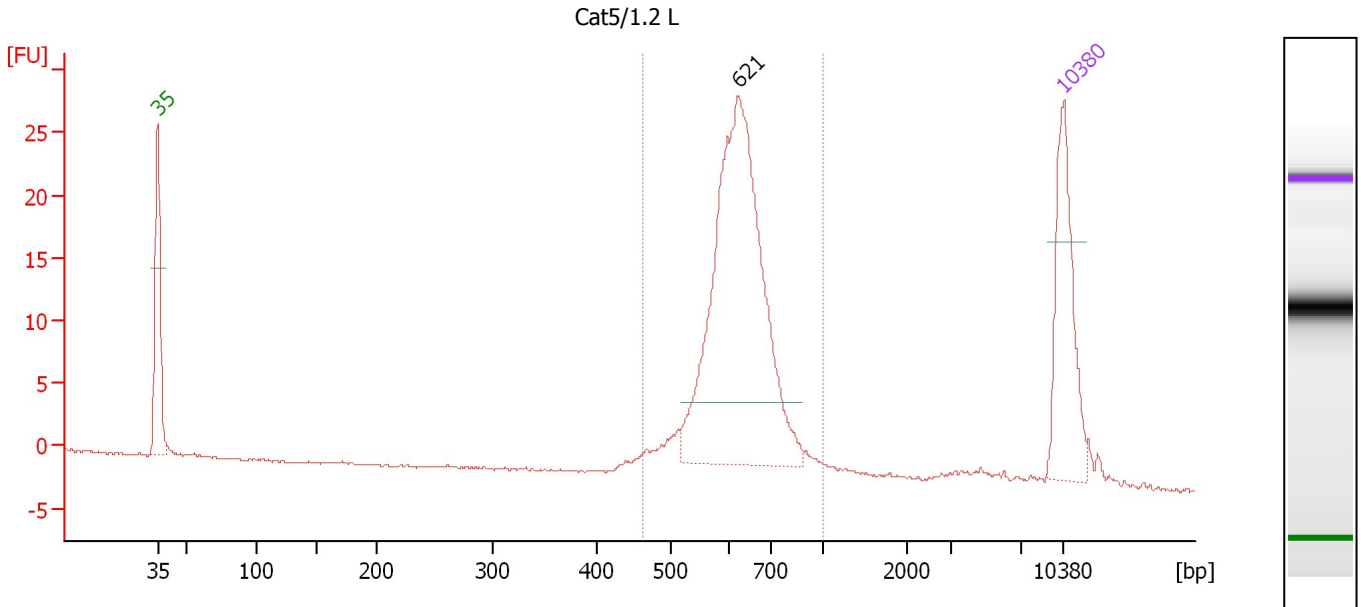
**Region table for sample 9 : Cat5/1.1 L**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
461	632	1,000	259.5	1,115.1	92	12.1	458.13	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 10 : Cat5/1.2 L**

Number of peaks found: 1                      Corr. Area 1: 161.4  
 Noise: 0.1

**Peak table for sample 10 : Cat5/1.2 L**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	621	339.97	829.2		87.90
3	10,380	75.00	10.9	Upper Marker	113.00

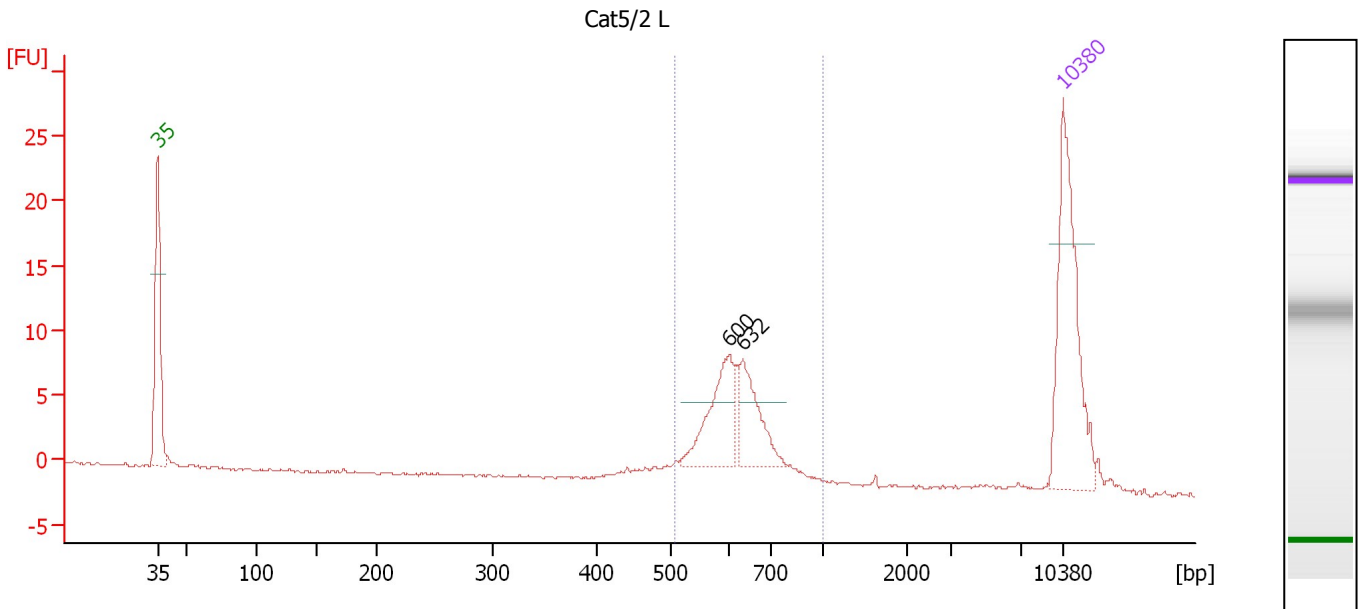
**Region table for sample 10 : Cat5/1.2 L**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
461	628	1,000	161.4	945.7	92	12.3	386.18	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
 Modified: 5/4/2015 12:59:11 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 11 : Cat5/2 L**

Number of peaks found: 2                      Corr. Area 1: 52.5  
 Noise: 0.1

**Peak table for sample 11 : Cat5/2 L**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	600	46.55	117.6		87.21
3	632	36.35	87.1		88.25
4	10,380	75.00	10.9	Upper Marker	113.00

**Region table for sample 11 : Cat5/2 L**

From [bp]	Average Size [bp]	To [bp]	Corr. Area	Molarity [pmol/l]	% of Total	Size distribution in CV [%]	Conc. [pg/μl]	Color
509	625	1,000	52.5	300.2	86	11.7	122.44	Blue

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2015-05-04\2015-05-04\_003.xad

Created: 5/4/2015 12:18:23 PM  
Modified: 5/4/2015 12:59:11 PM

**Gel Image**

