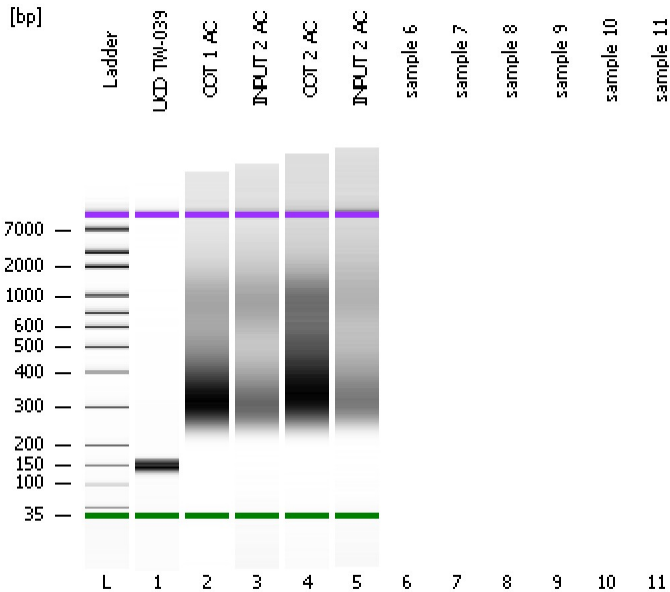


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
Modified: 2/5/2013 12:12:44 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

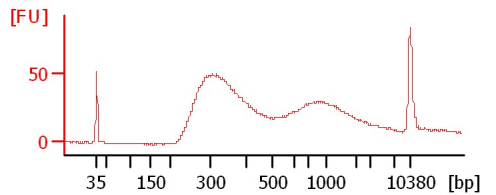
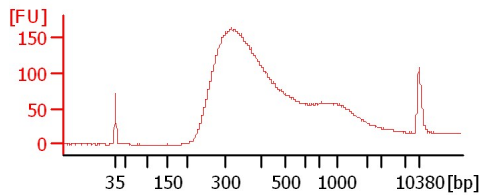
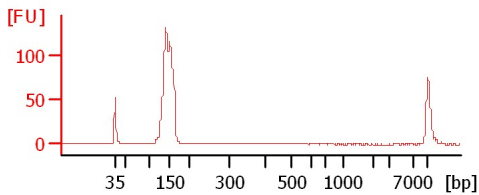
Chip Information:

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

**UCD TW-039**

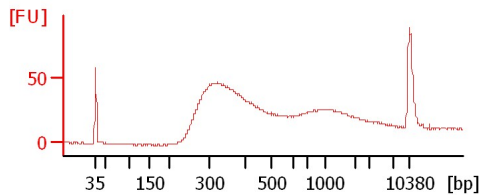
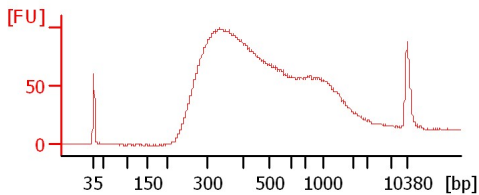
**COT 1 AC**

**INPUT 2 AC**



**COT 2 AC**

**INPUT 2 AC**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
UCD TW-039		<input type="checkbox"/>	✓			
COT 1 AC		<input type="checkbox"/>	✓			
INPUT 2 AC		<input type="checkbox"/>	✓			
COT 2 AC		<input type="checkbox"/>	✓			
INPUT 2 AC		<input type="checkbox"/>	✓			
sample 6		<input type="checkbox"/>				
sample 7		<input type="checkbox"/>				
sample 8		<input type="checkbox"/>				
sample 9		<input type="checkbox"/>				
sample 10		<input type="checkbox"/>				
sample 11		<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\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
Modified: 2/5/2013 12:12:44 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

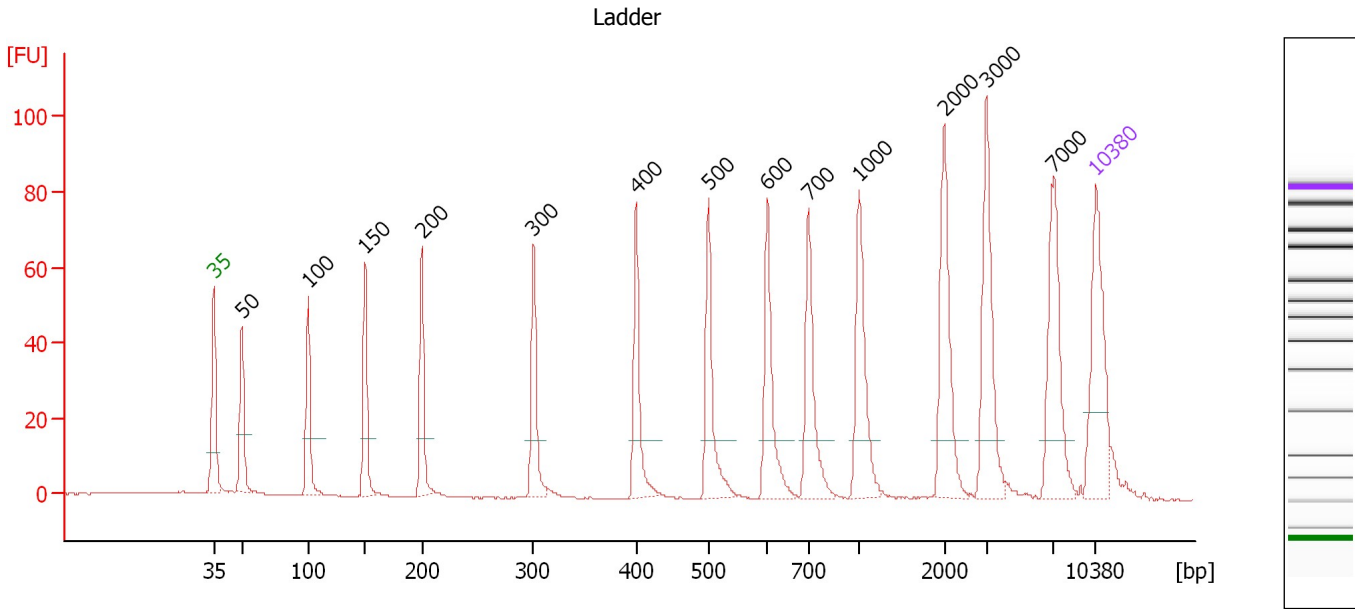
**Ladder**

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\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

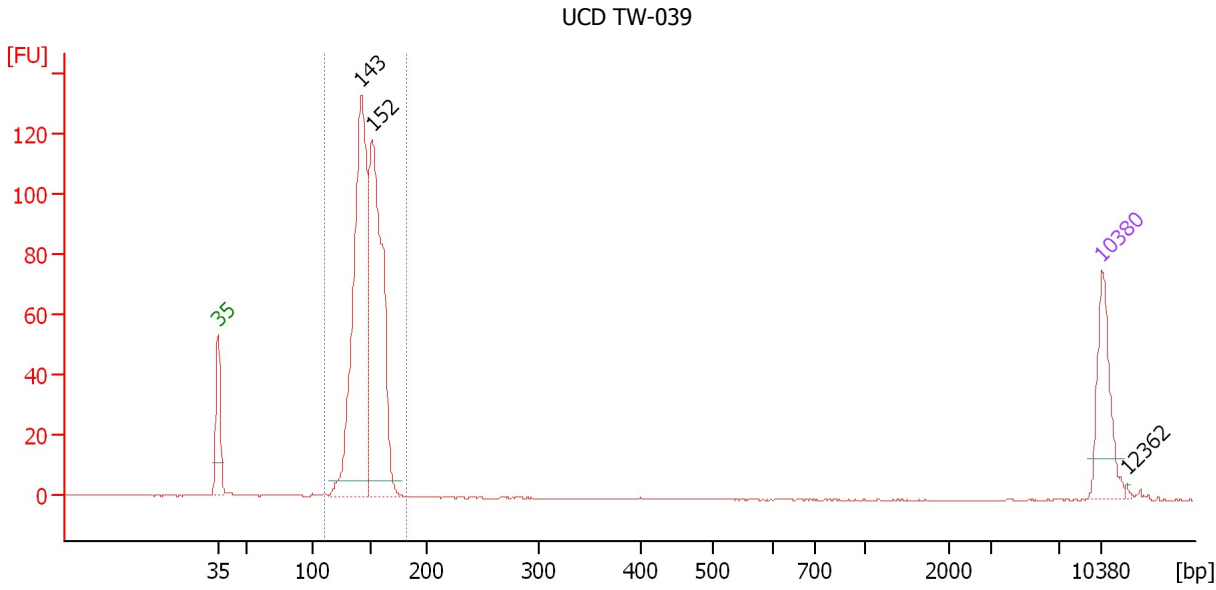
**Peak table for Ladder**

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\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 1 : UCD TW-039**

Number of peaks found: 3                      Corr. Area 1: 621.6  
 Noise: 0.2

**Peak table for sample 1 : UCD TW-039**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	143	598.61	6,353.0	
3	152	520.23	5,181.8	
4	10,380	75.00	10.9	Upper Marker
5	12,362	0.00	0.0	

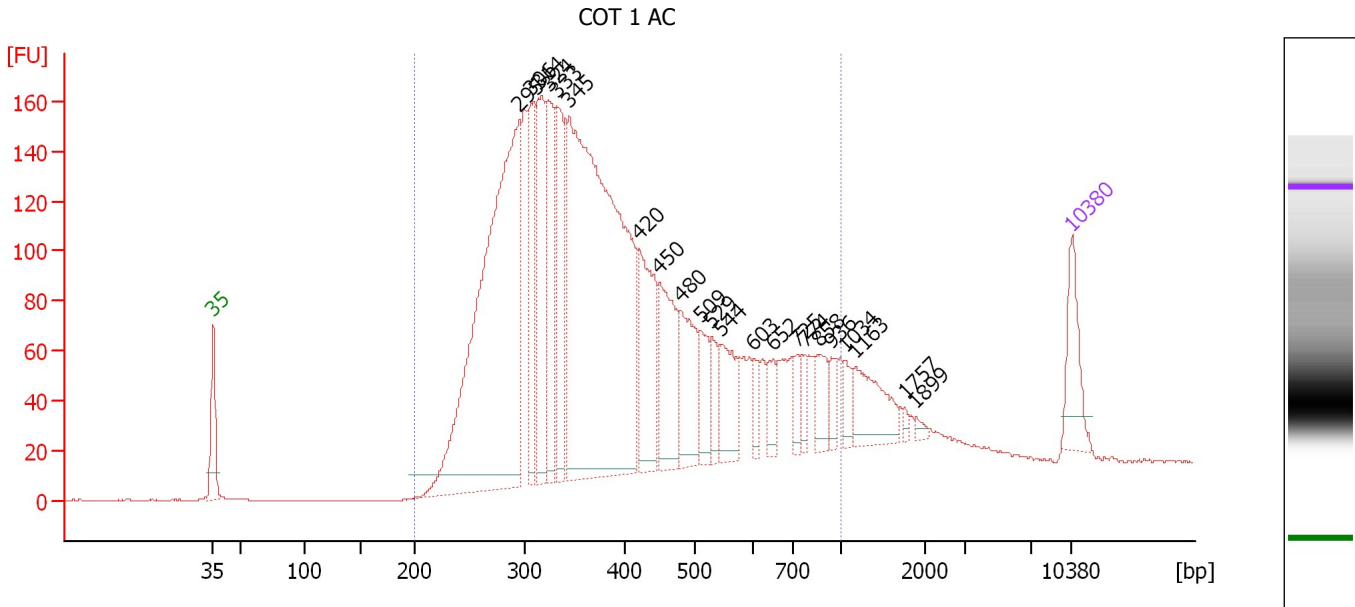
**Region table for sample 1 : UCD TW-039**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
111	182	148	11,469.4	1,116.01	621.6	98	6.9	Blue

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 2 : COT 1 AC**

Number of peaks found: 22                      Corr. Area 1: 3,792.7  
 Noise: 0.1

**Peak table for sample 2 : COT 1 AC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	295	1,170.05	6,007.8	
3	306	196.10	971.4	
4	314	263.53	1,272.1	
5	324	227.92	1,067.5	
6	333	228.98	1,043.1	
7	345	1,309.85	5,753.9	
8	420	213.28	768.6	
9	450	190.50	641.6	
10	480	148.42	468.4	
11	509	69.94	208.2	
12	529	57.27	163.9	
13	544	104.08	289.8	
14	603	30.16	75.7	
15	652	40.57	94.4	
16	725	29.85	62.4	
17	774	28.75	56.3	
18	858	54.98	97.1	
19	936	31.79	51.5	
20	1,034	27.89	40.9	
21	1,163	99.42	129.5	
22	1,757	6.77	5.8	
23	1,899	7.12	5.7	
24	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary Continued ...**

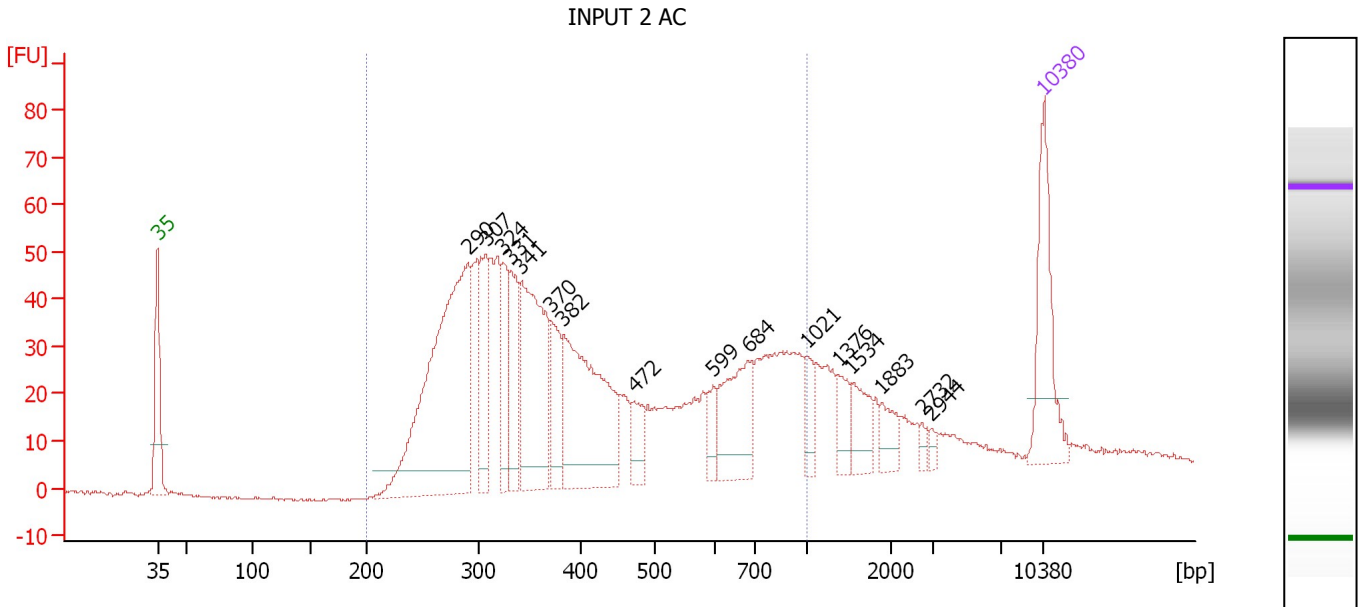
... Region table for sample 2 : COT 1 AC

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	418	20,870.5	4,959.37	3,792.7	92	37.9	■

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 3 : INPUT 2 AC**

Number of peaks found: 16      Corr. Area 1: 1,116.0  
 Noise: 0.3

**Peak table for sample 3 : INPUT 2 AC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	290	389.35	2,031.1	
3	307	79.21	390.9	
4	324	55.75	260.8	
5	331	72.54	332.1	
6	341	181.19	804.3	
7	370	57.74	236.3	
8	382	200.27	793.9	
9	472	29.26	93.9	
10	599	20.75	52.5	
11	684	87.47	193.9	
12	1,021	19.97	29.6	
13	1,376	23.72	26.1	
14	1,534	31.77	31.4	
15	1,883	19.55	15.7	
16	2,732	5.32	3.0	
17	2,944	4.67	2.4	
18	10,380	75.00	10.9	Upper Marker

**Region table for sample 3 : INPUT 2 AC**

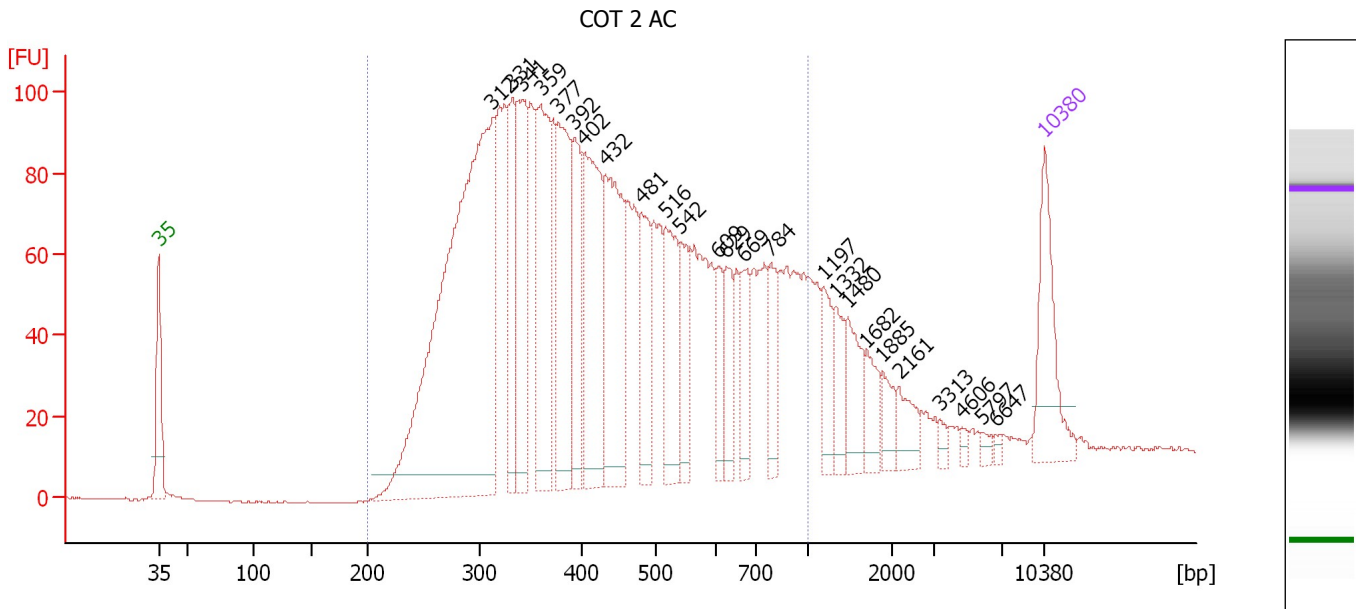
From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	444	6,080.0	1,465.44	1,116.0	85	42.5	Blue



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 4 : COT 2 AC**

Number of peaks found: 25                      Corr. Area 1: 2,714.9  
 Noise: 0.3

**Peak table for sample 4 : COT 2 AC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	312	783.12	3,798.0	
3	331	107.50	491.5	
4	341	165.10	733.8	
5	359	188.15	793.4	
6	377	165.38	665.3	
7	392	106.06	410.3	
8	402	195.45	737.3	
9	432	186.23	653.8	
10	481	88.09	277.3	
11	516	105.41	309.7	
12	542	69.12	193.3	
13	609	36.92	91.8	
14	629	47.73	115.0	
15	669	50.26	113.8	
16	784	45.64	88.2	
17	1,197	42.58	53.9	
18	1,332	32.18	36.6	
19	1,480	48.17	49.3	
20	1,682	29.50	26.6	
21	1,885	21.34	17.2	
22	2,161	26.96	18.9	
23	3,313	7.29	3.3	
24	4,606	4.76	1.6	
25	5,797	5.66	1.5	
26	6,647	3.46	0.8	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary Continued ...****... Peak table for sample 4 : COT 2 AC**

Peak	Size [bp]	Conc. [pg/ $\mu$ l]	Molarity [pmol/l]	Observations
27	10,380	75.00	10.9	Upper Marker

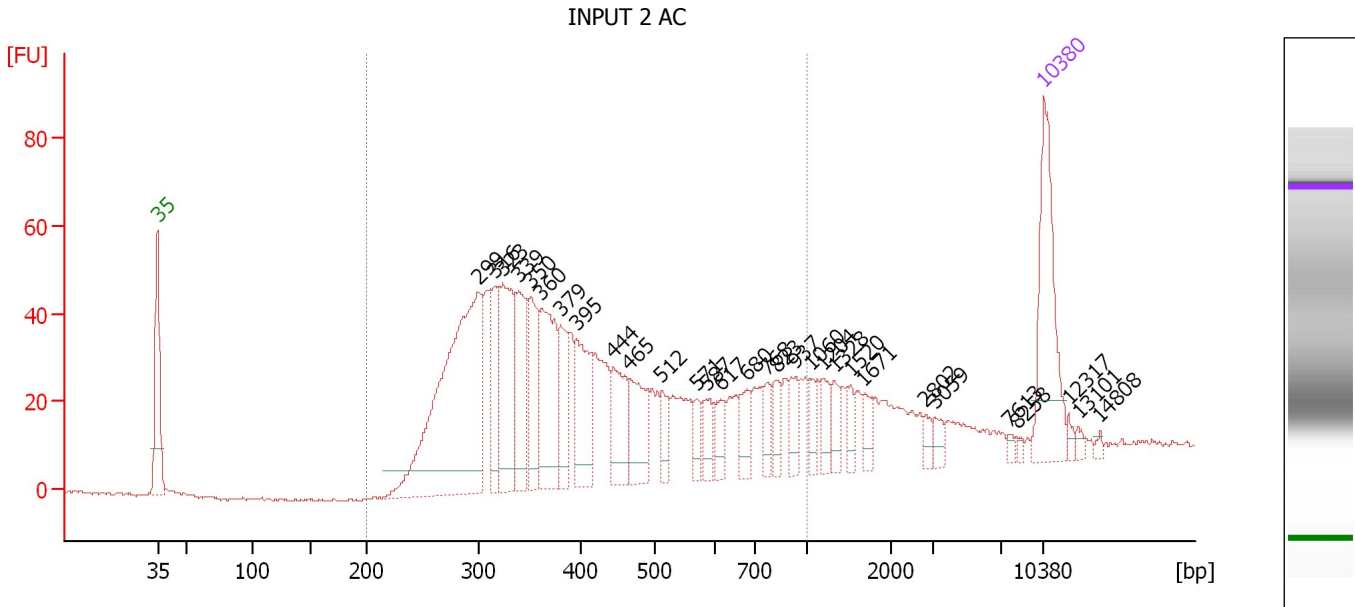
**Region table for sample 4 : COT 2 AC**

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/ $\mu$ l]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	456	12,143.7	3,107.13	2,714.8	88	37.3	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : INPUT 2 AC**

Number of peaks found: 30      Corr. Area 1: 1,040.1  
 Noise: 0.2

**Peak table for sample 5 : INPUT 2 AC**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	299	301.52	1,527.1	
3	316	48.30	231.5	
4	323	94.25	442.1	
5	339	74.14	331.5	
6	350	56.30	243.6	
7	360	93.17	391.6	
8	379	39.89	159.3	
9	395	61.26	235.2	
10	444	46.71	159.5	
11	465	46.37	151.0	
12	512	17.86	52.9	
13	571	13.94	37.0	
14	587	18.24	47.0	
15	617	18.62	45.7	
16	680	21.58	48.1	
17	768	15.99	31.5	
18	823	16.87	31.0	
19	937	18.25	29.5	
20	1,060	12.27	17.5	
21	1,204	15.31	19.3	
22	1,328	12.61	14.4	
23	1,520	10.65	10.6	
24	1,671	10.71	9.7	
25	2,802	6.55	3.5	
26	3,059	7.64	3.8	

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

### Electropherogram Summary Continued ...

#### ... Peak table for sample 5 : INPUT 2 AC

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations
27	7,613	3.00	0.6	
28	8,258	2.42	0.4	
29	10,380	75.00	10.9	Upper Marker
30	12,317	0.00	0.0	
31	13,101	0.00	0.0	
32	14,808	0.00	0.0	

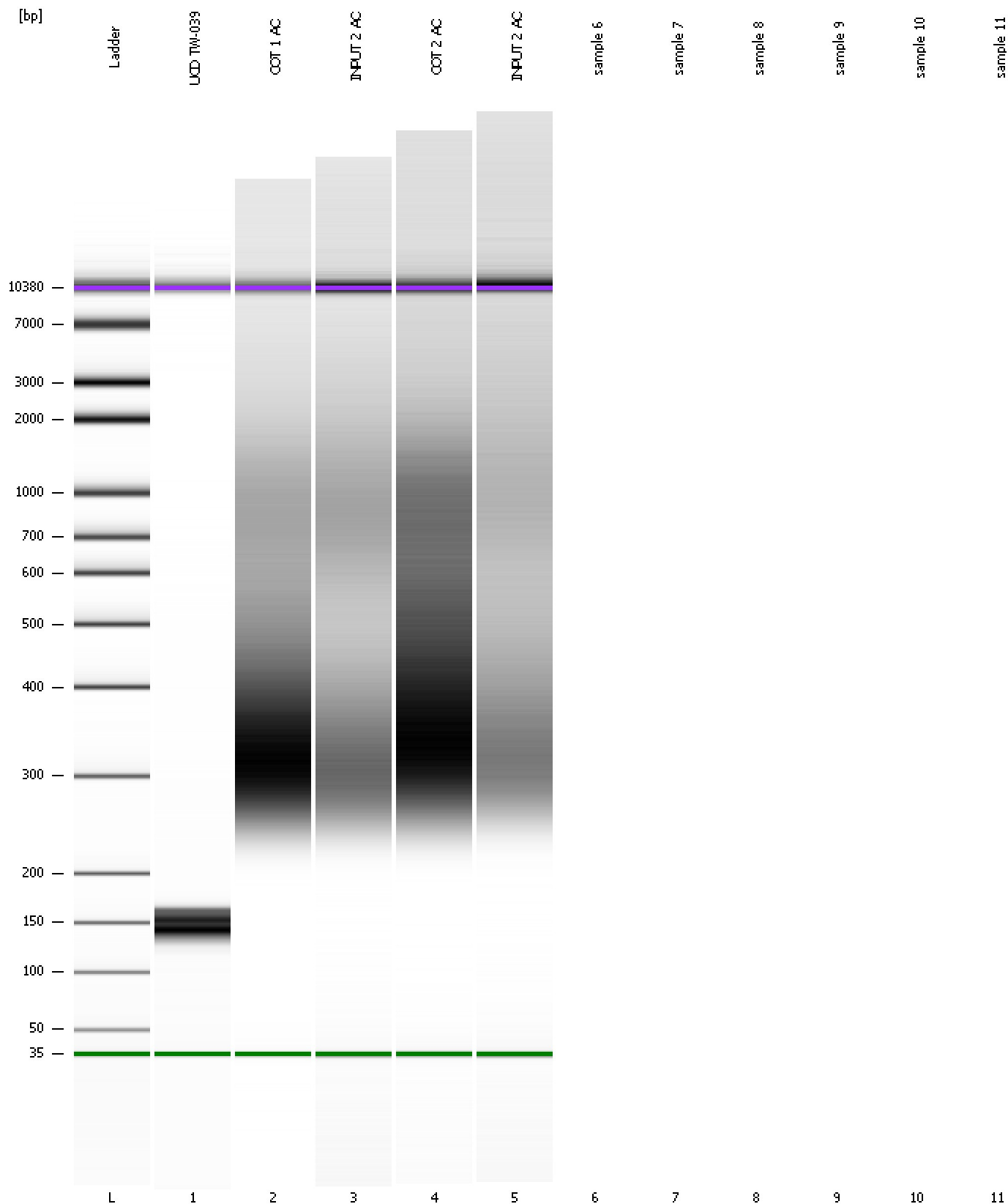
#### Region table for sample 5 : INPUT 2 AC

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/μl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
200	1,000	443	4,623.2	1,147.53	1,040.1	81	39.2	

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
Modified: 2/5/2013 12:12:44 PM

**Gel Image**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
Modified: 2/5/2013 12:12:44 PM

**Invalid Samples**

Sample 6 has not been run, no results available.

Sample 7 has not been run, no results available.

Sample 8 has not been run, no results available.

Sample 9 has not been run, no results available.

Sample 10 has not been run, no results available.

Sample 11 has not been run, no results available.

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ents and Settings\Bioanalyzer\2013-02-05\2013-02-05\_004.xad

Created: 2/5/2013 11:48:33 AM  
 Modified: 2/5/2013 12:12:44 PM

**Run Logbook**

Description	Number	Source	Category	Sub Category	Time	Time Zone	User	Host
Run ended on port 1 (Number of wells acquired: 6)		Instrument	Run		2/5/2013 12:12:42 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-02-05\2013-02-05_004.xad)		Instrument	Run		2/5/2013 11:48:39 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/5/2013 11:48:39 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/5/2013 11:48:39 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/5/2013 11:48:39 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/5/2013 11:48:39 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/5/2013 11:48:39 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/5/2013 11:48:39 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1