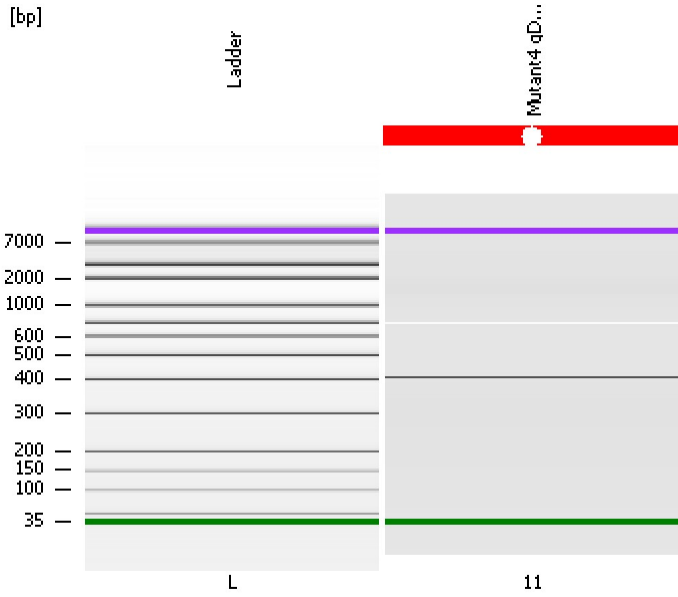


Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
Modified: 2/24/2016 3:49:37 PM

**Electrophoresis File Run Summary**



Instrument Information:

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

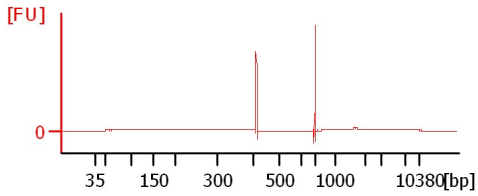
Assay Information:

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:

**Mutant4 gDNA with RNase and Zymo Cleanup**



Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
Modified: 2/24/2016 3:49:37 PM

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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
Mutant4 gDNA with RNase and Zymo Cleanup		<input type="checkbox"/>				
Ladder		<input type="checkbox"/>				

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

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
Modified: 2/24/2016 3:49:37 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

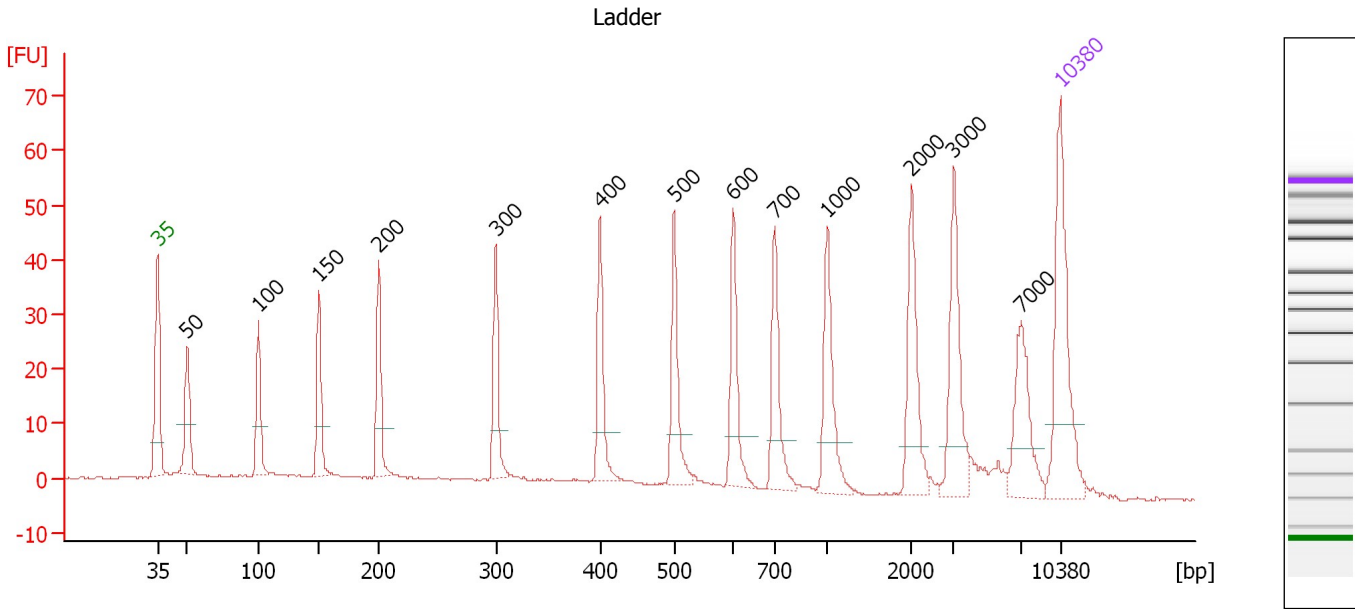
**Ladder**

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:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.2

**Peak table for Ladder**

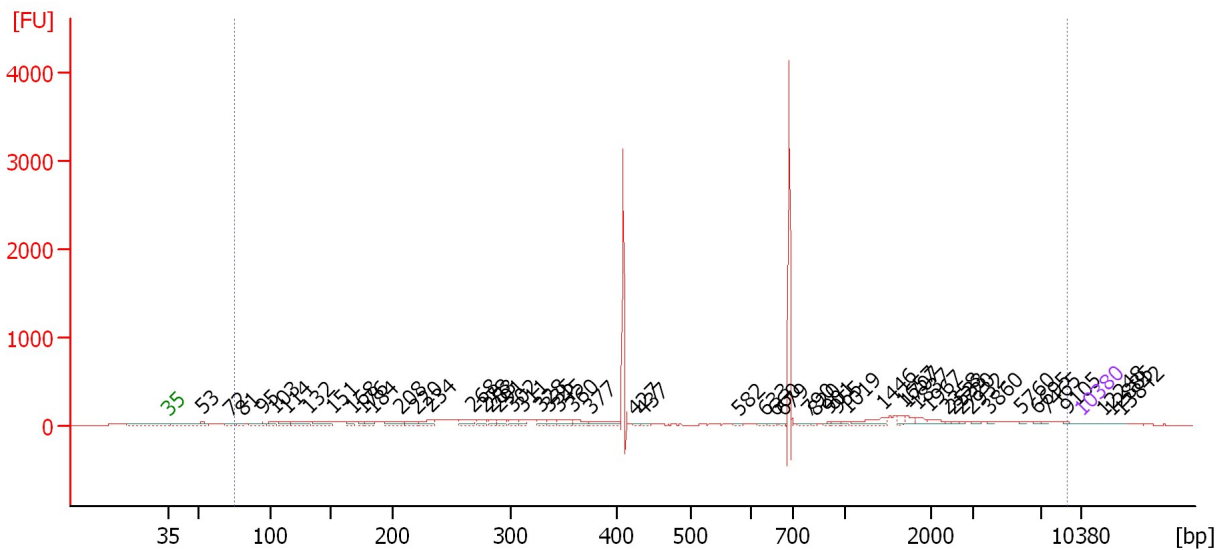
Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
1	35	125.00	5,411.3	Lower Marker	43.00
2	50	150.00	4,545.5	Ladder Peak	45.30
3	100	150.00	2,272.7	Ladder Peak	50.80
4	150	150.00	1,515.2	Ladder Peak	55.50
5	200	150.00	1,136.4	Ladder Peak	60.14
6	300	150.00	757.6	Ladder Peak	69.24
7	400	150.00	568.2	Ladder Peak	77.33
8	500	150.00	454.5	Ladder Peak	83.08
9	600	150.00	378.8	Ladder Peak	87.62
10	700	150.00	324.7	Ladder Peak	90.88
11	1,000	150.00	227.3	Ladder Peak	94.95
12	2,000	150.00	113.6	Ladder Peak	101.51
13	3,000	150.00	75.8	Ladder Peak	104.76
14	7,000	150.00	32.5	Ladder Peak	109.98
15	10,380	75.00	10.9	Upper Marker	113.00

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
 Modified: 2/24/2016 3:49:37 PM

**Electropherogram Summary Continued ...**

Mutant4 gDNA with RNase and Zymo Cleanup



**Overall Results for sample 11 : Mutant4 gDNA with RNase and Zymo Cleanup**

Number of peaks found: 53                      Corr. Area 1: 5,191.2  
 Noise: 0.5

**Peak table for sample 11 : Mutant4 gDNA with RNase and Zymo Cleanup**

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	53	968.39	27,619.3		45.64
3	72	392.87	8,273.3		47.72
4	81	242.54	4,526.9		48.73
5	95	543.27	8,679.5		50.24
6	103	341.50	5,021.7		51.09
7	114	405.64	5,397.6		52.11
8	132	714.30	8,222.3		53.77
9	151	777.00	7,789.8		55.60
10	168	327.39	2,956.8		57.15
11	176	289.98	2,495.3		57.92
12	184	370.69	3,046.0		58.69
13	208	788.99	5,754.3		60.85
14	220	570.69	3,925.8		61.98
15	234	572.95	3,715.2		63.20
16	268	642.73	3,632.8		66.33
17	278	409.04	2,226.6		67.27
18	283	321.36	1,721.7		67.67
19	291	380.28	1,981.0		68.41
20	302	350.85	1,761.5		69.38
21	311	283.78	1,383.3		70.11
22	328	367.53	1,695.7		71.54
23	335	330.55	1,493.1		72.11
24	345	493.42	2,163.9		72.92
25	360	478.07	2,011.8		74.10

Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
 Modified: 2/24/2016 3:49:37 PM

**Electropherogram Summary Continued ...**

**... Peak table for sample 11 : Mutant4 gDNA with RNase and Zymo Cleanup**

Peak	Size [bp]	Conc. [pg/μl]	Molarity [pmol/l]	Observations	Aligned Migration Time [s]
26	377	639.48	2,572.5		75.44
27	427	40.51	143.9		78.85
28	437	35.97	124.7		79.46
29	582	16.47	42.8		86.82
30	633	25.99	62.2		88.69
31	660	41.24	94.6		89.59
32	679	42.75	95.4		90.20
33	790	65.60	125.8		92.11
34	820	51.47	95.1		92.51
35	901	72.17	121.3		93.61
36	955	89.47	141.9		94.34
37	1,019	101.73	151.3		95.07
38	1,446	644.16	674.7		97.88
39	1,657	240.13	219.5		99.26
40	1,707	313.94	278.7		99.59
41	1,837	252.80	208.5		100.44
42	1,967	280.10	215.7		101.29
43	2,358	84.73	54.4		102.67
44	2,533	74.85	44.8		103.24
45	2,720	71.80	40.0		103.85
46	2,932	106.94	55.3		104.54
47	3,860	82.21	32.3		105.89
48	5,760	62.95	16.6		108.37
49	6,695	64.72	14.6		109.59
50	7,465	61.62	12.5		110.40
51	9,105	87.44	14.6		111.86
52	10,380	75.00	10.9	Upper Marker	113.00
53	12,248	0.00	0.0		114.67
54	12,885	0.00	0.0		115.24
55	13,842	0.00	0.0		116.09

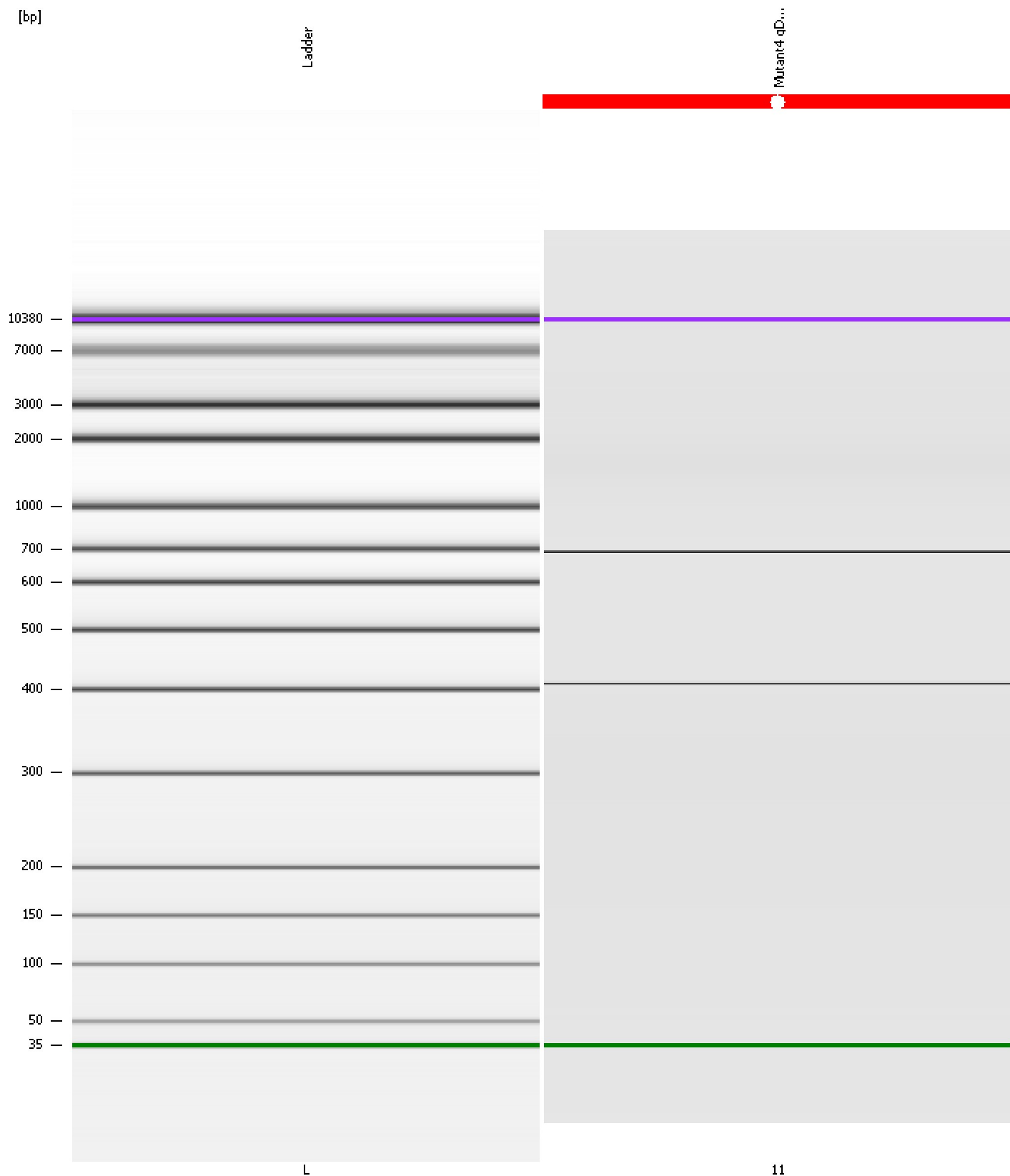
**Region table for sample 11 : Mutant4 gDNA with RNase and Zymo Cleanup**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
76	9,152	1,046	5,191.2	138,775.7	26,370.32	94	100.0

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
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**Gel Image**



Assay Class: High Sensitivity DNA Assay  
 Data Path: C:\...ioanalyzer\2016-02-24\2016-02-24\_002\_Mutant4\_with\_RNase.xad

Created: 2/24/2016 2:47:21 PM  
 Modified: 2/24/2016 3:49:37 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		2/24/2016 3:27:48 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Instrument error occurred on port 1, Optical signal too high (1605h)	559	Instrument	Run	Sample 11	2/24/2016 3:26:39 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2016-02-24\2016-02-24_002.xad)		Instrument	Run		2/24/2016 2:47:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		2/24/2016 2:47:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		2/24/2016 2:47:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		2/24/2016 2:47:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		2/24/2016 2:47:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		2/24/2016 2:47:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		2/24/2016 2:47:26 PM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1