

Assay Class: High Sensitivity DNA Assay  
Data Path: C:\...oanalyzer\2015-11-03\2015-11-03\_002\_C4ITS\_C216S\_LigRxns.xad

Created: 11/3/2015 12:00:07 PM  
Modified: 11/3/2015 12:42:45 PM

**Electrophoresis File Run Summary**

Instrument Information:

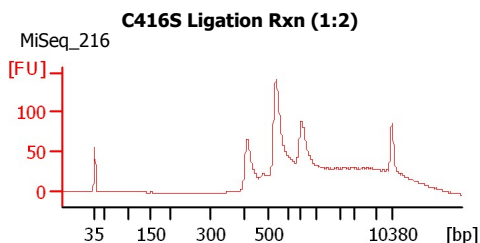
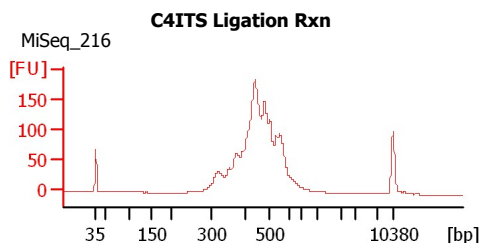
Instrument Name: DE13701086                      Firmware: C.01.069  
Serial#: DE13701086                              Type: G2938B

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:



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

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
C4ITS Ligation Rxn	MiSeq_216	<input type="checkbox"/>				
C416S Ligation Rxn (1:2)	MiSeq_216	<input type="checkbox"/>				
Ladder		<input type="checkbox"/>				
<b>Chip Lot #</b>				<b>Reagent Kit Lot #</b>		

**Chip Comments :**

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**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

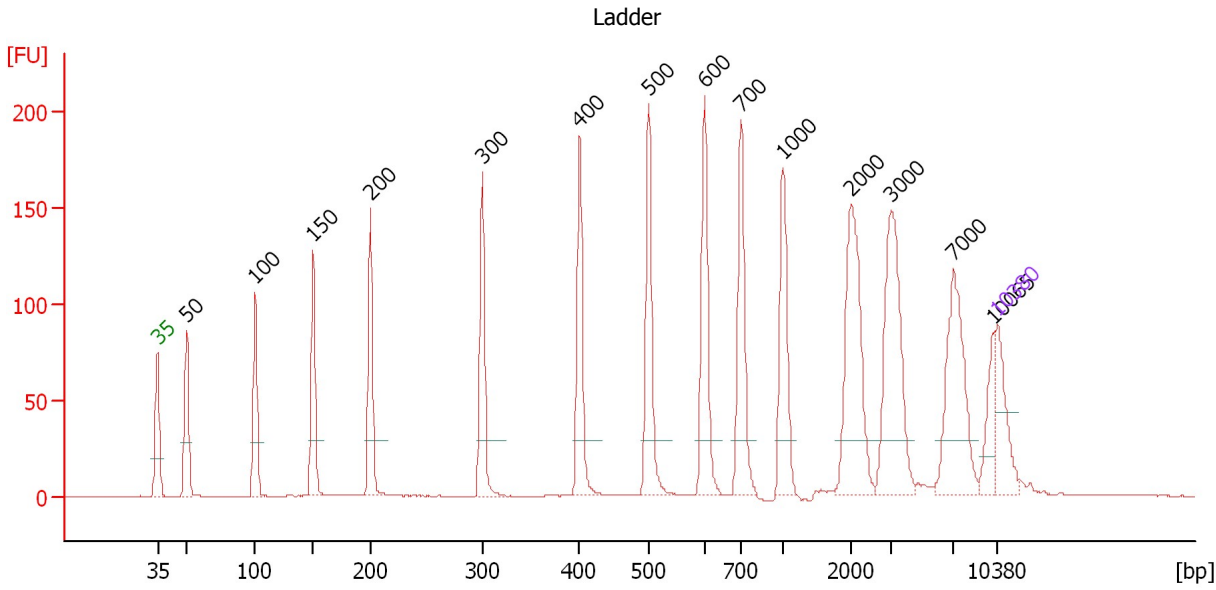
**Ladder**

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

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**Electropherogram Summary**



**Overall Results for Ladder**

Noise: 0.1

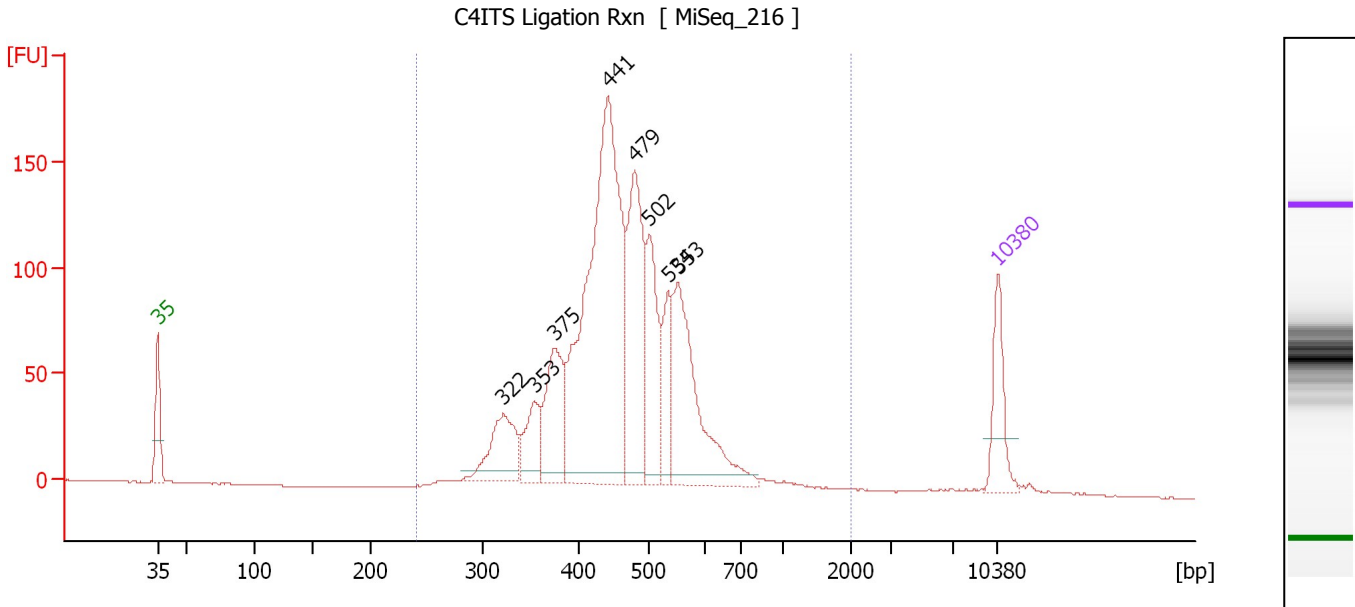
**Peak table for Ladder**

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	45.44
3	100	150.00	2,272.7	Ladder Peak	51.16
4	150	150.00	1,515.2	Ladder Peak	55.99
5	200	150.00	1,136.4	Ladder Peak	60.73
6	300	150.00	757.6	Ladder Peak	70.06
7	400	150.00	568.2	Ladder Peak	78.17
8	500	150.00	454.5	Ladder Peak	83.94
9	600	150.00	378.8	Ladder Peak	88.58
10	700	150.00	324.7	Ladder Peak	91.60
11	1,000	150.00	227.3	Ladder Peak	95.12
12	2,000	150.00	113.6	Ladder Peak	100.79
13	3,000	150.00	75.8	Ladder Peak	104.11
14	7,000	150.00	32.5	Ladder Peak	109.34
15	10,065	0.00	0.0		112.66
16	10,380	75.00	10.9	Upper Marker	113.00

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**Electropherogram Summary Continued ...**



**Overall Results for sample 5 : C4ITS Ligation Rxn**

Number of peaks found: 8                      Corr. Area 1: 1,929.1  
 Noise: 0.1

**Peak table for sample 5 : C4ITS Ligation Rxn**

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	322	135.31	636.9		71.84
3	353	87.12	373.9		74.36
4	375	164.24	663.9		76.13
5	441	804.02	2,763.4		80.53
6	479	294.66	931.3		82.75
7	502	174.32	526.5		84.01
8	534	86.32	244.8		85.53
9	553	298.66	818.6		86.38
10	10,380	75.00	10.9	Upper Marker	113.00

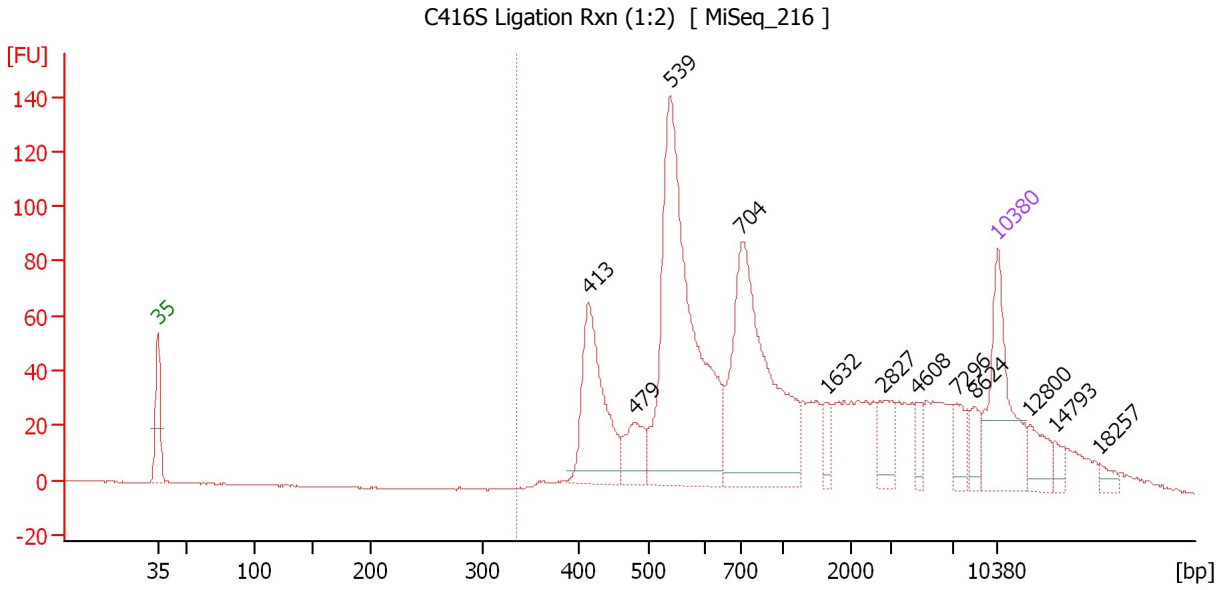
**Region table for sample 5 : C4ITS Ligation Rxn**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. [pg/μl]	% of Total	Size distribution in CV [%]
241	1,985	473	1,929.1	7,399.8	2,171.84	98	27.6

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**Electropherogram Summary Continued ...**



**Overall Results for sample 6 : C416S Ligation Rxn (1:2)**

Number of peaks found: 12                      Corr. Area 1: 1,691.1  
 Noise: 0.1

**Peak table for sample 6 : C416S Ligation Rxn (1:2)**

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	413	126.27	463.6		78.90
3	479	37.90	120.0		82.71
4	539	339.47	954.4		85.74
5	704	243.17	523.1		91.66
6	1,632	13.62	12.6		98.70
7	2,827	25.78	13.8		103.54
8	4,608	11.85	3.9		106.21
9	7,296	18.34	3.8		109.66
10	8,624	14.16	2.5		111.10
11	10,380	75.00	10.9	Upper Marker	113.00
12	12,800	0.00	0.0		115.62
13	14,793	0.00	0.0		117.78
14	18,257	0.00	0.0		121.54

**Region table for sample 6 : C416S Ligation Rxn (1:2)**

From [bp]	To [bp]	Average Size [bp]	Corr. Area	Molarity [pmol/l]	Co Conc. lor [pg/μl]	% of Total	Size distribution in CV [%]
335	26,555	3,967	1,691.1	2,147.2	1,087.29	100	100.0

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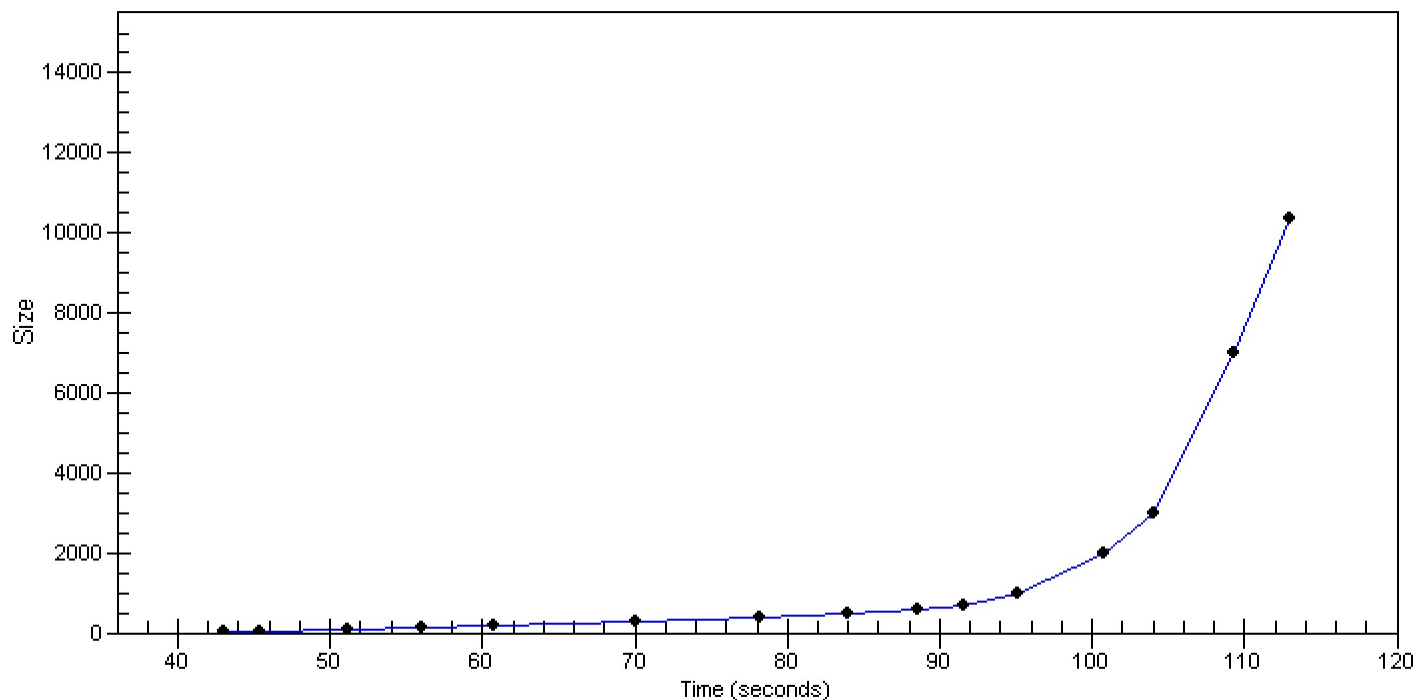
**Gel Image**

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**Curves**

**Standard Curve**





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**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		11/3/2015 8:41:24 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2015-11-03\2015-11-03_002.xad)		Instrument	Run		11/3/2015 8:00:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		11/3/2015 8:00:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		11/3/2015 8:00:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		11/3/2015 8:00:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		11/3/2015 8:00:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		11/3/2015 8:00:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		11/3/2015 8:00:12 AM	(GMT --08:00) Pacific Standard Time	UC Davis	D8XSMGH1