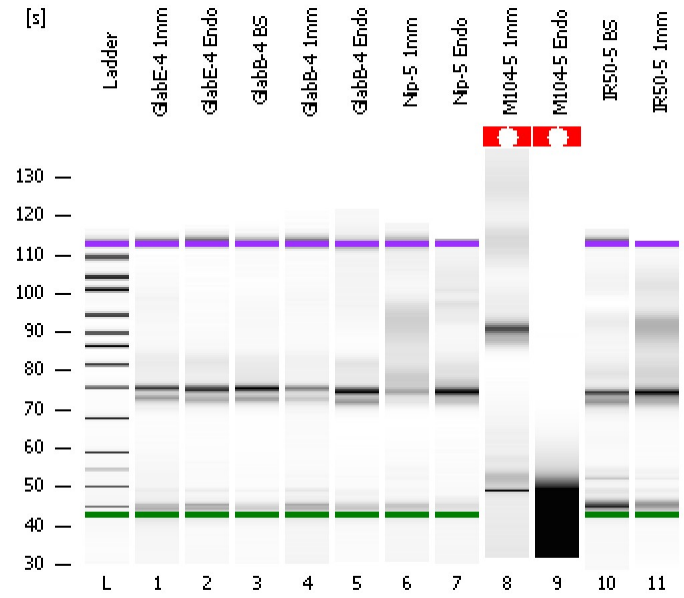
Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electrophoresis File Run Summary



Instrument Information:

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

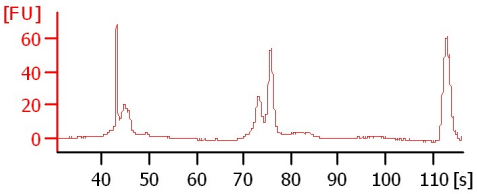
Assay Information:

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

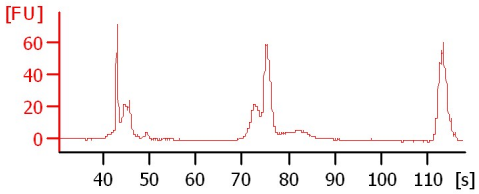
Chip Information:

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

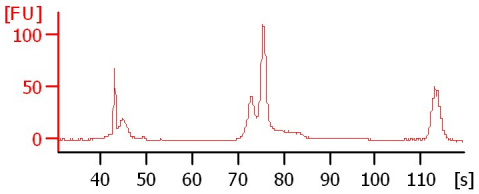
GlabE-4 1mm



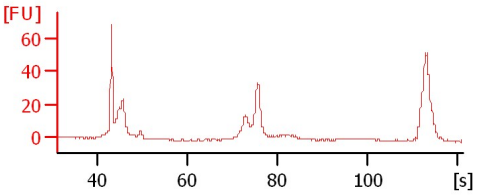
GlabE-4 Endo



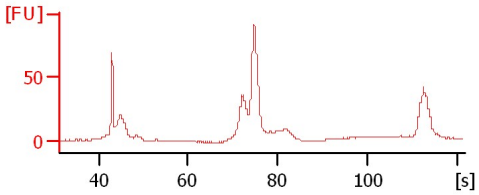
GlabB-4 BS



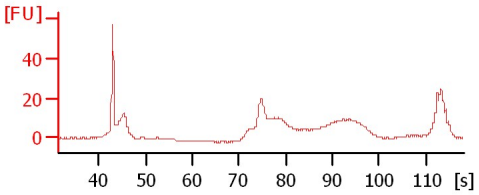
GlabB-4 1mm



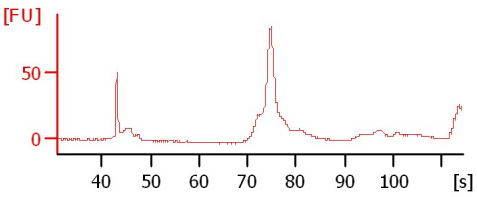
GlabB-4 Endo



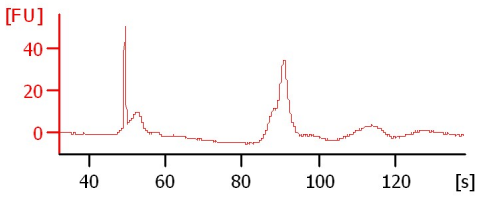
Nip-5 1mm



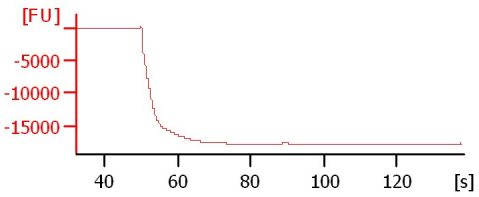
Nip-5 Endo



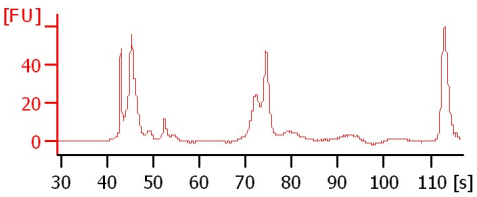
M104-5 1mm



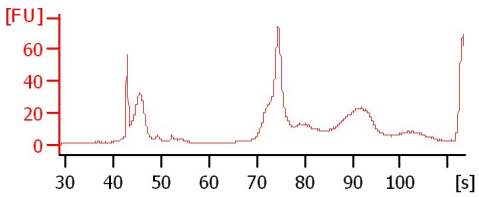
M104-5 Endo



IR50-5 BS



IR50-5 1mm



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electrophoresis File Run Summary (Chip Summary)

Sample Name	Sample Comment	Rest. Digest	Status	Observation	Result Label	Result Color
GlabE-4 1mm		☐	✓			
GlabE-4 Endo		☐	✓			
GlabB-4 BS		☐	✓			
GlabB-4 1mm		☐	✓			
GlabB-4 Endo		☐	✓			
Nip-5 1mm		☐	✓			
Nip-5 Endo		☐	✓			
M104-5 1mm		☐	✓			
M104-5 Endo		☐	⚠			
IR50-5 BS		☐	✓			
IR50-5 1mm		☐	✓			
Ladder		☐	✓			

Chip Lot # **Reagent Kit Lot #**

Chip Comments :

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 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

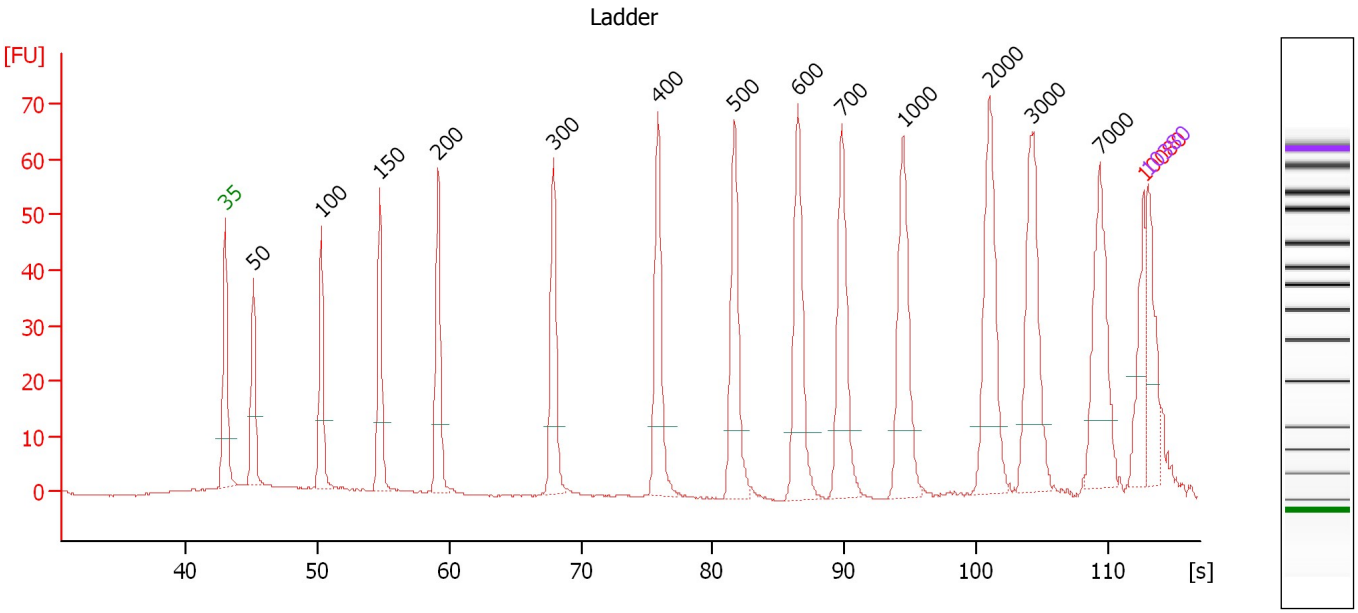
Ladder

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\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary



Overall Results for Ladder

Noise: 0.1

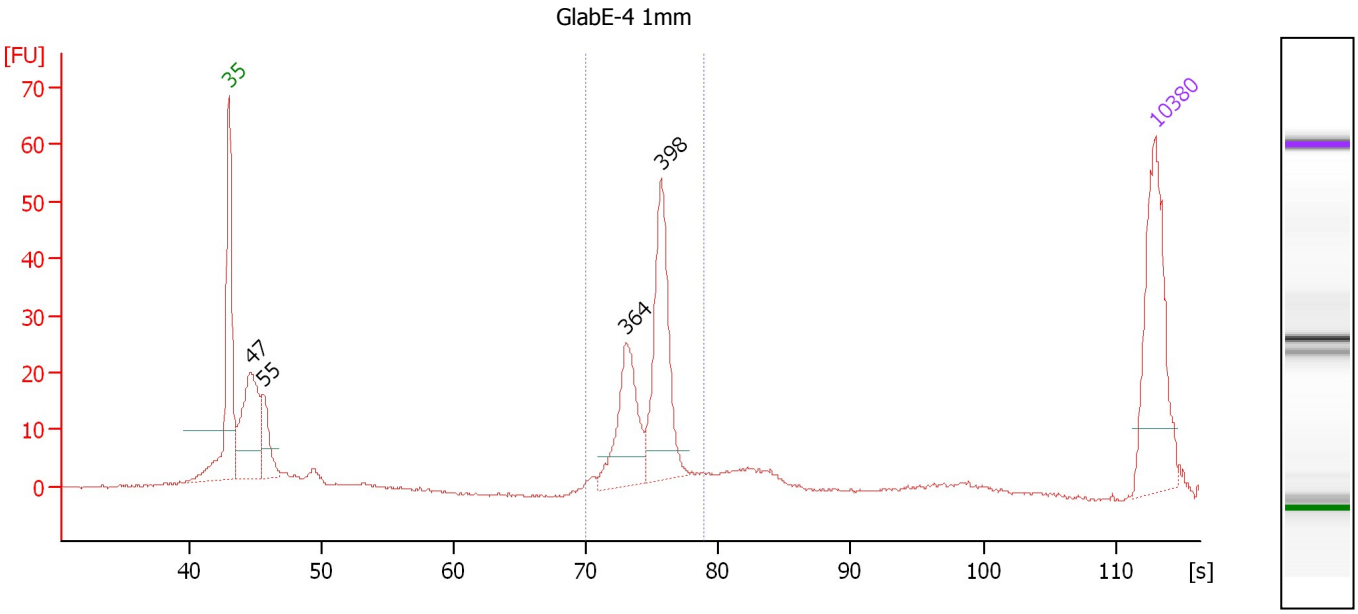
Peak table for Ladder

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	10,080	0.00	0.0	excluded peak
16	10,380	75.00	10.9	Upper Marker

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 1 : GlabE-4 1mm

Number of peaks found:	4	Corr. Area 1:	177.0
Noise:	0.2		

Peak table for sample 1 : GlabE-4 1mm

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1		35	125.00	5,411.3	Lower Marker
2		47	107.39	3,478.3	
3		55	37.97	1,045.6	
4		364	72.94	303.5	
5		398	102.81	391.6	
6		10,380	75.00	10.9	Upper Marker

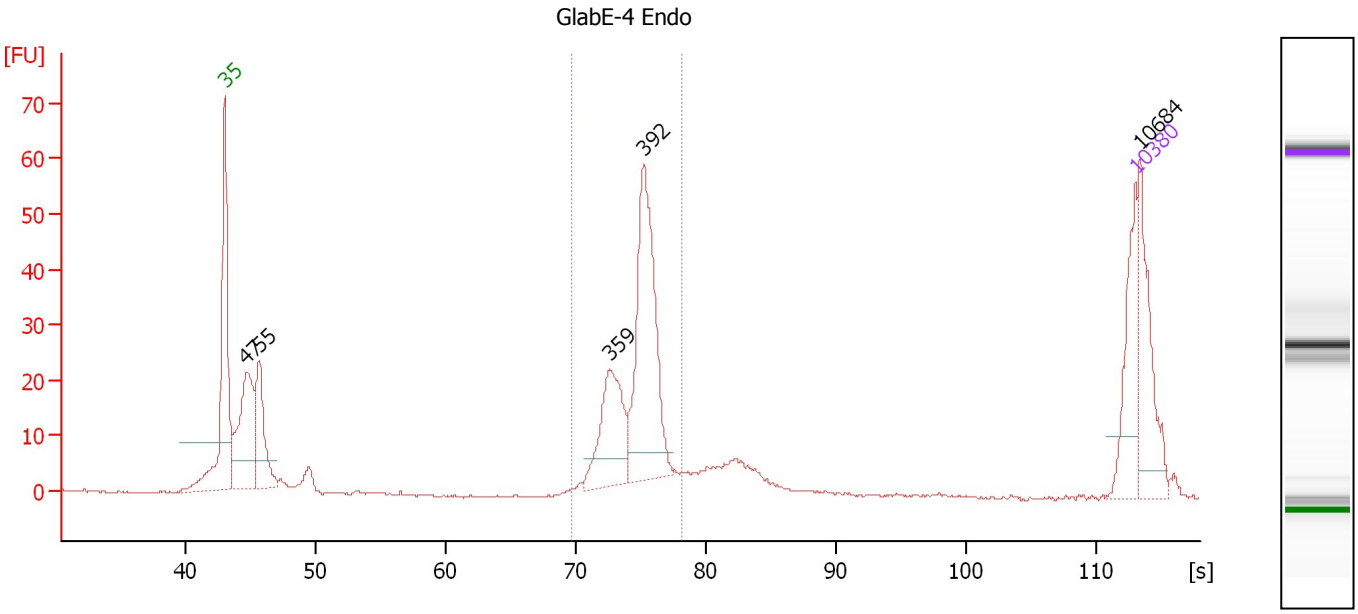
Region table for sample 1 : GlabE-4 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
326	451	387	770.1	196.18	177.0	50	5.7	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 2 : GlabE-4 Endo

Number of peaks found:	5	Corr. Area 1:	216.7
Noise:	0.1		

Peak table for sample 2 : GlabE-4 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	47	205.81	6,679.2	
3	55	126.90	3,467.5	
4	359	135.34	571.0	
5	392	272.85	1,055.0	
6	10,380	75.00	10.9	Upper Marker
7	10,684	0.00	0.0	

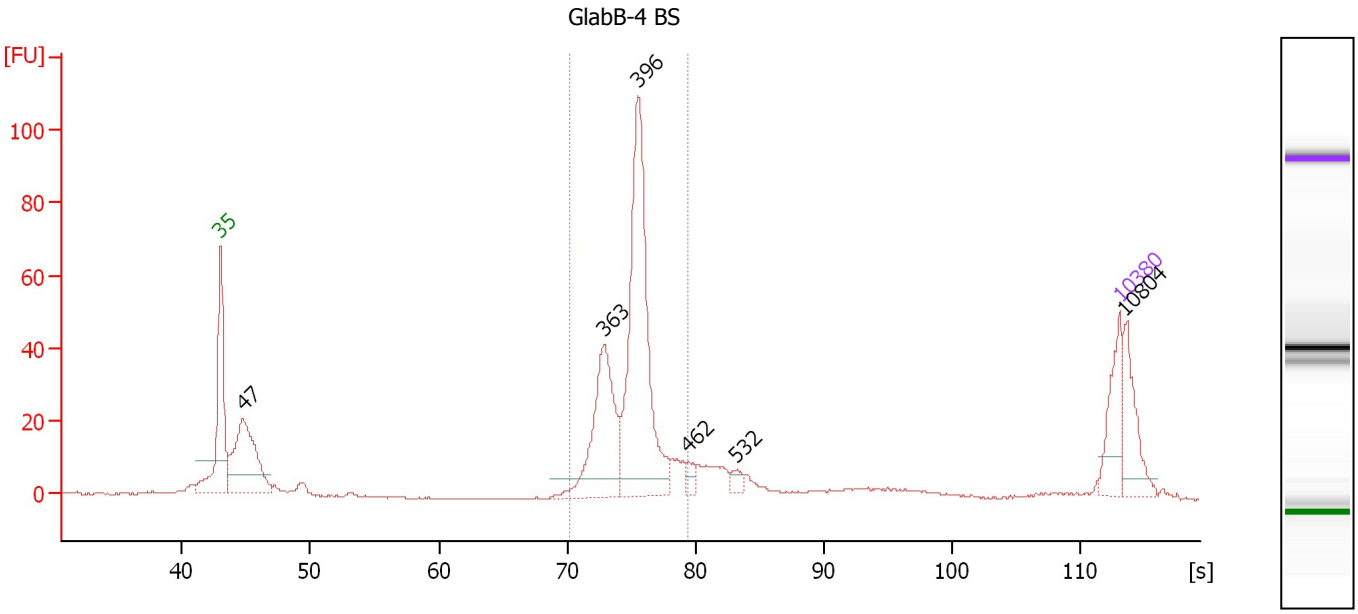
Region table for sample 2 : GlabE-4 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
322	440	385	1,773.8	449.90	216.7	48	5.4	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 3 : GlabB-4 BS

Number of peaks found:	6	Corr. Area 1:	375.9
Noise:	0.2		

Peak table for sample 3 : GlabB-4 BS

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1		35	125.00	5,411.3	Lower Marker
2		47	289.96	9,262.0	
3		363	257.26	1,073.9	
4		396	505.77	1,937.1	
5		462	16.78	55.0	
6		532	16.33	46.5	
7		10,380	75.00	10.9	Upper Marker
8		10,804	0.00	0.0	

Region table for sample 3 : GlabB-4 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
328	462	390	3,080.4	791.47	375.9	59	6.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

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Modified: 5/23/2013 4:04:25 PM

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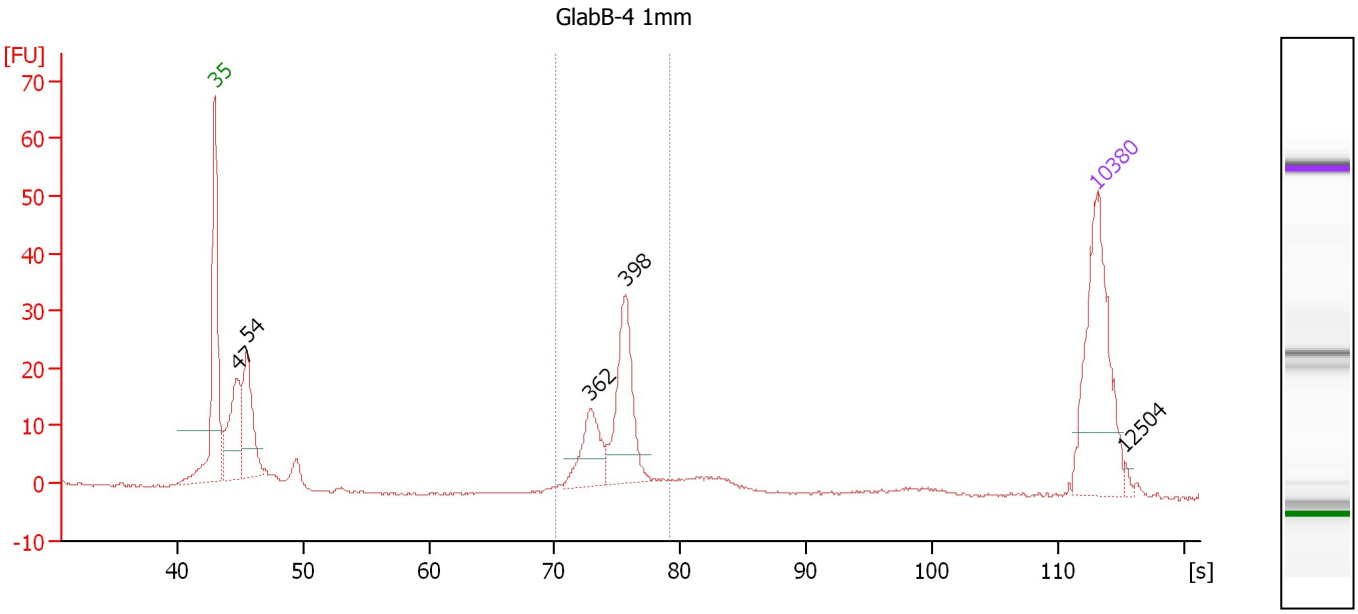


Overall Results for sample 4 : GlabB-4 1mm

Number of peaks found:	5	Corr. Area 1:	116.7
Noise:	0.2		

Peak table for sample 4 : GlabB-4 1mm

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	◀	35	125.00	5,411.3	Lower Marker
2		47	71.98	2,301.3	
3		54	69.61	1,958.2	
4		362	38.61	161.5	
5		398	69.31	264.1	
6	▶	10,380	75.00	10.9	Upper Marker
7		12,504	0.00	0.0	

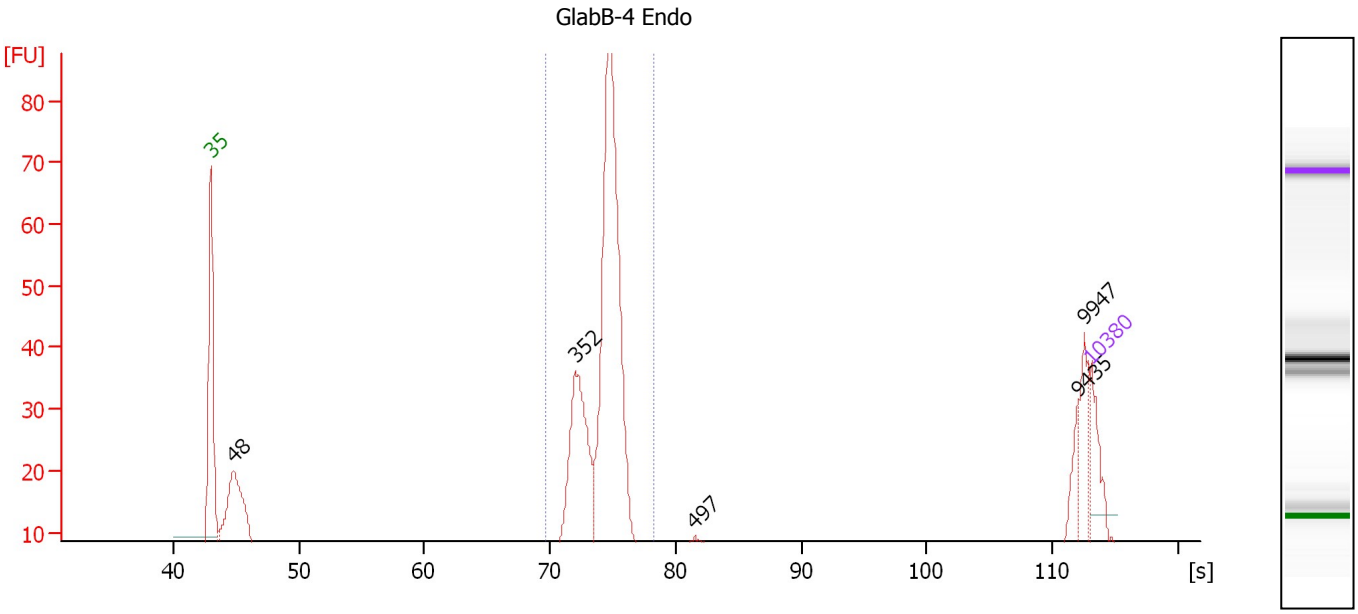
Region table for sample 4 : GlabB-4 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
328	457	387	486.0	123.93	116.7	43	5.9	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 5 : GlabB-4 Endo

Number of peaks found:	9	Corr. Area 1:	328.1
Noise:	0.1		

Peak table for sample 5 : GlabB-4 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	48	472.98	15,021.7	
3	352	367.34	1,581.7	
4	386	696.20	2,730.6	
5	439	17.38	59.9	
6	473	34.64	111.0	
7	497	43.11	131.4	
8	524	21.04	60.8	
9	9,435	46.07	7.4	
10	9,947	57.05	8.7	
11	10,380	75.00	10.9	Upper Marker

Region table for sample 5 : GlabB-4 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
323	440	379	4,096.8	1,023.83	328.1	56	5.5	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

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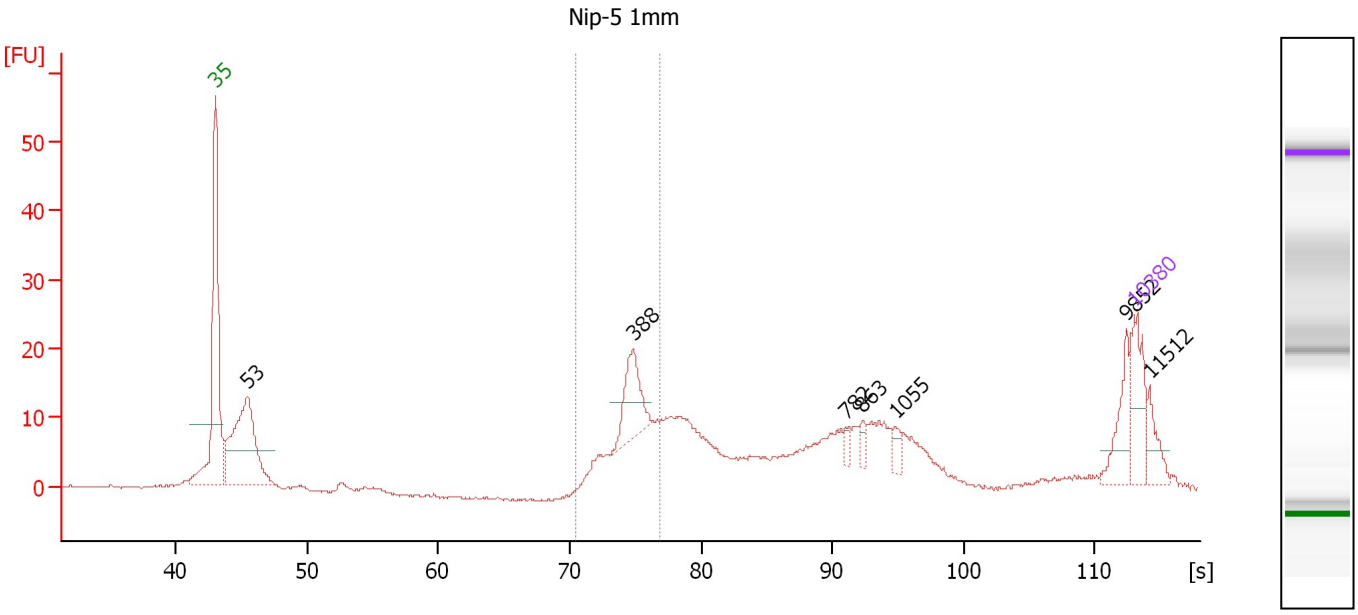


Overall Results for sample 6 : Nip-5 1mm

Number of peaks found:	7	Corr. Area 1:	73.4
Noise:	0.2		

Peak table for sample 6 : Nip-5 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	53	375.77	10,690.1	
3	388	109.38	427.7	
4	782	13.74	26.6	
5	863	15.55	27.3	
6	1,055	18.09	26.0	
7	9,852	57.54	8.8	
8	10,380	75.00	10.9	Upper Marker
9	11,512	0.00	0.0	

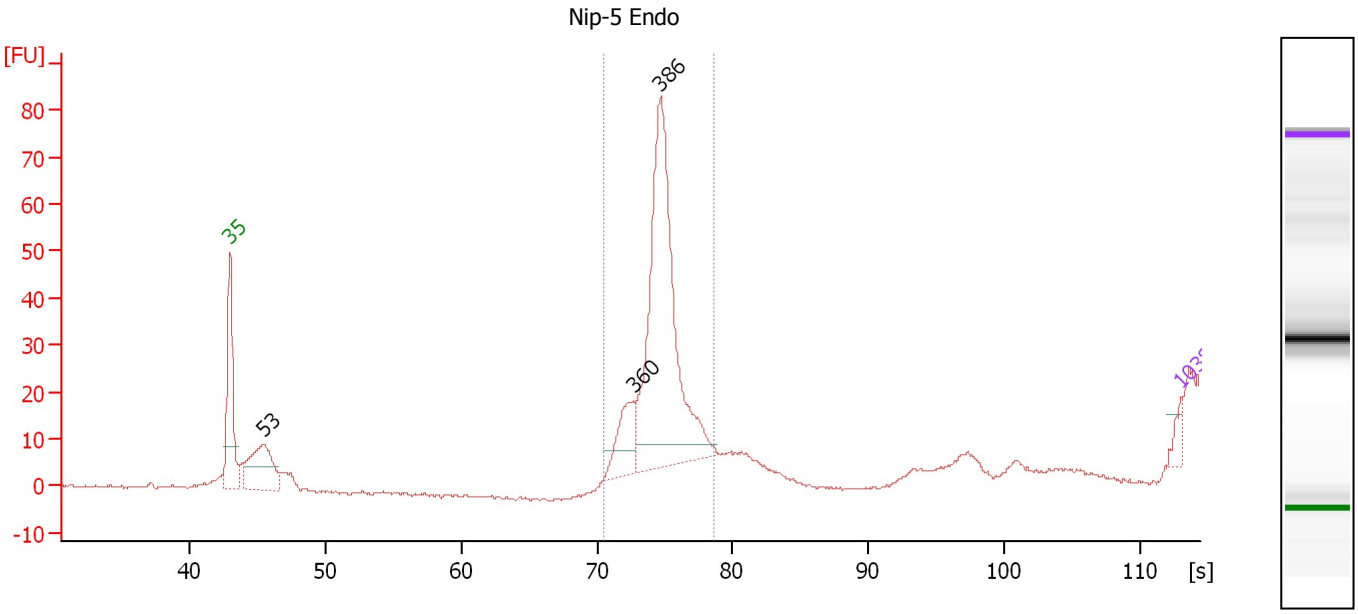
Region table for sample 6 : Nip-5 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
332	417	385	1,229.4	312.06	73.4	21	4.3	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 7 : Nip-5 Endo

Number of peaks found:	3	Corr. Area 1:	176.5
Noise:	0.3		

Peak table for sample 7 : Nip-5 Endo

Peak		Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1		35	125.00	5,411.3	Lower Marker
2		53	833.74	23,914.0	
3		360	439.90	1,850.0	
4		386	2,909.87	11,432.7	
5		10,380	75.00	10.9	Upper Marker

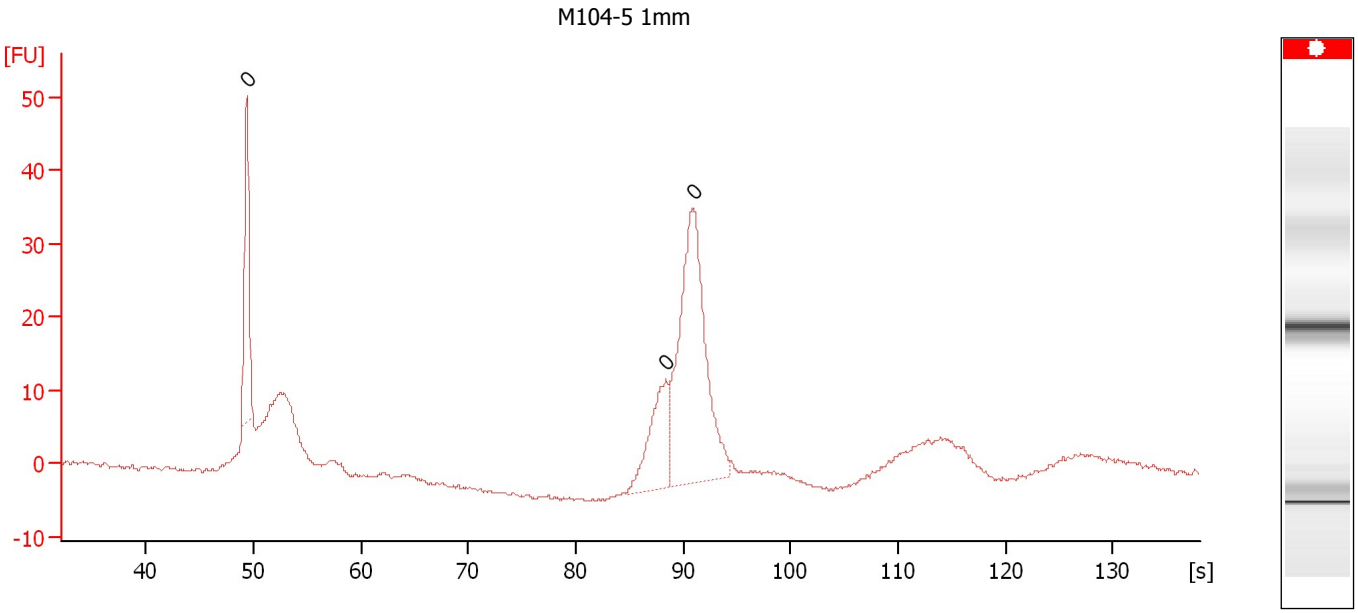
Region table for sample 7 : Nip-5 Endo

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
334	447	385	8,632.3	2,193.27	176.5	91	3.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 8 : M104-5 1mm

Number of peaks found: 0 Noise: 0.2

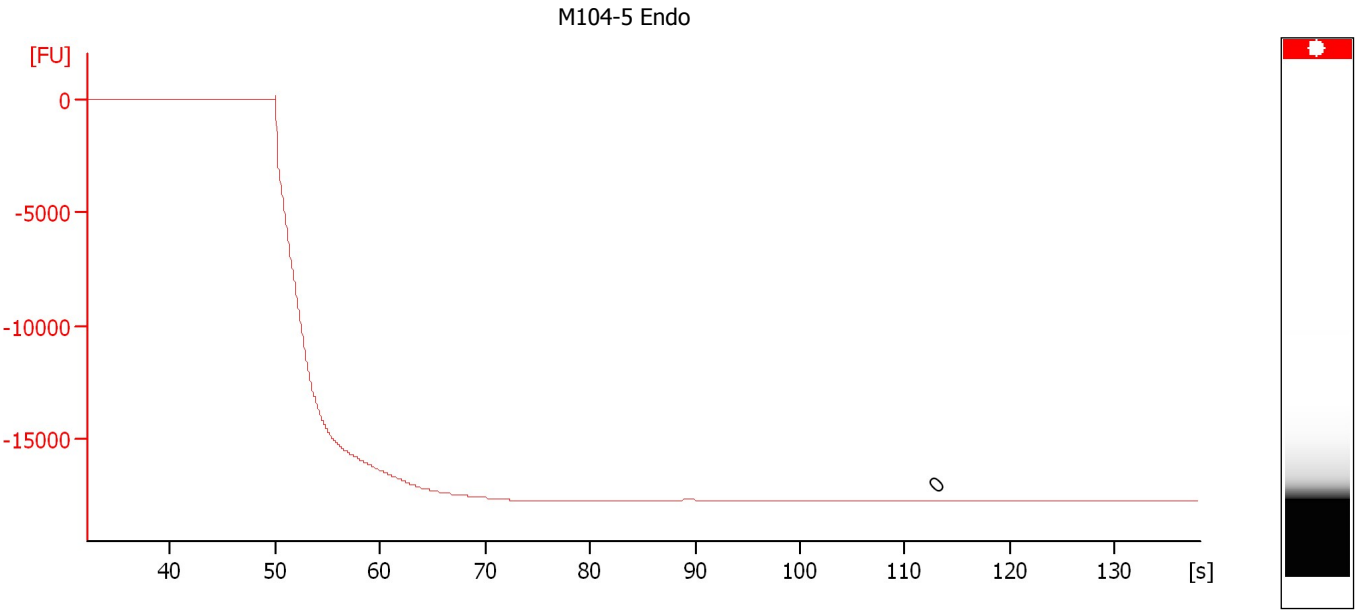
Peak table for sample 8 : M104-5 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	0	0.00	0.0	
3	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 9 : M104-5 Endo

Number of peaks found:	0	Noise:	0.3

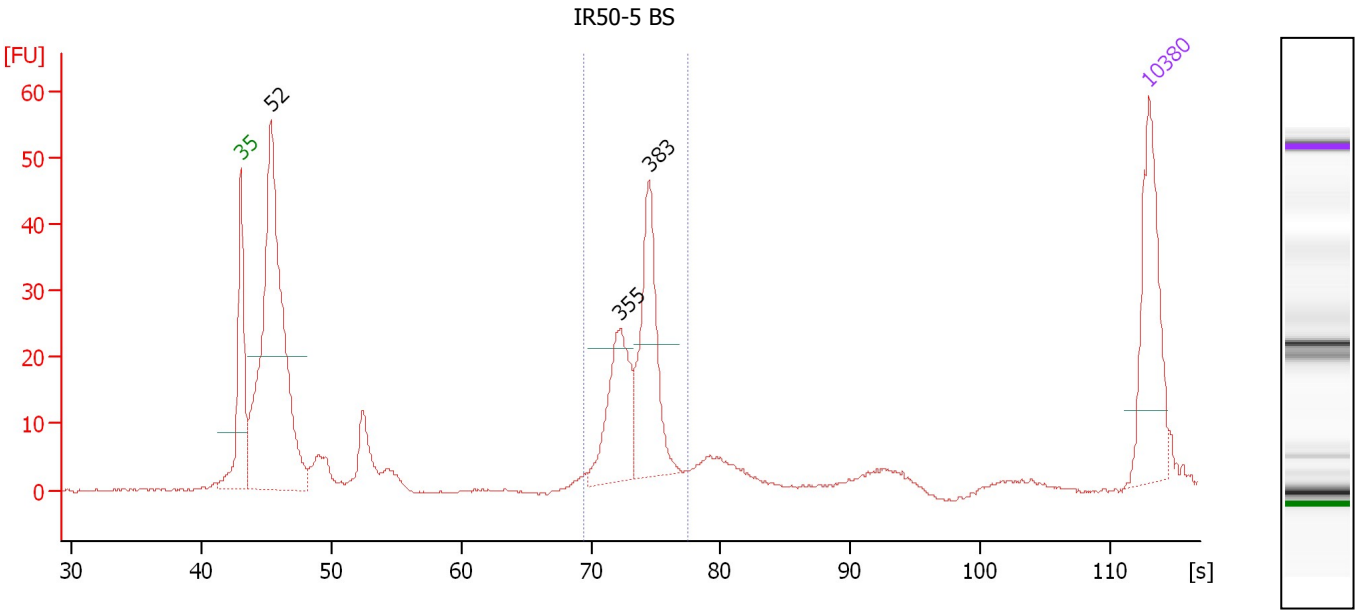
Peak table for sample 9 : M104-5 Endo

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Setpoint Deviations for sample 10 : IR50-5 BS

Height Threshold [FU] : 20

Overall Results for sample 10 : IR50-5 BS

Number of peaks found:	3	Corr. Area 1:	166.0
Noise:	0.2		

Peak table for sample 10 : IR50-5 BS

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	35	125.00	5,411.3	Lower Marker
2	52	457.16	13,237.2	
3	355	94.11	401.7	
4	383	120.60	477.5	
5	10,380	75.00	10.9	Upper Marker

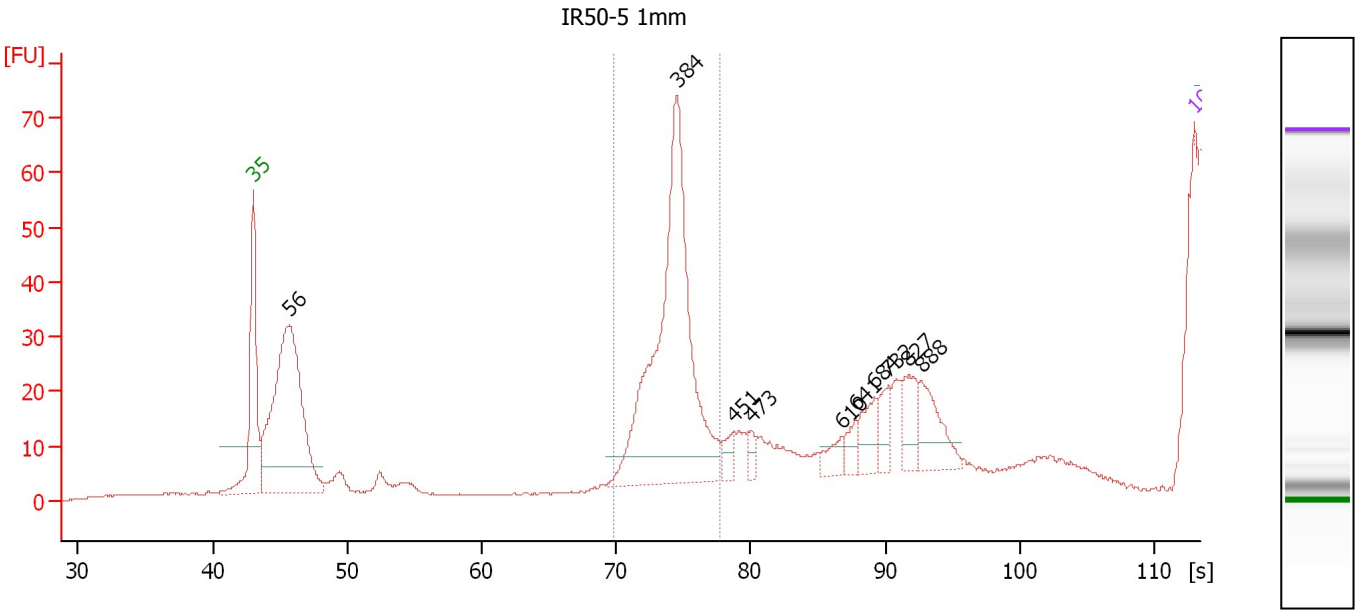
Region table for sample 10 : IR50-5 BS

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
320	427	371	940.2	230.00	166.0	35	5.1	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 PM

Electropherogram Summary Continued ...



Overall Results for sample 11 : IR50-5 1mm

Number of peaks found:	11	Corr. Area 1:	58.5
Noise:	0.2		

Peak table for sample 11 : IR50-5 1mm

Peak	Size [bp]	Conc. [pg/µl]	Molarity [pmol/l]	Observations
1	0	0.00	0.0	
2	35	125.00	5,411.3	Lower Marker
3	56	55,194.80	1,499,664.4	
4	384	56,220.24	221,998.3	
5	451	2,056.69	6,907.8	
6	473	1,386.11	4,439.7	
7	610	2,074.93	5,154.7	
8	641	1,948.67	4,606.3	
9	684	3,987.35	8,832.5	
10	732	3,076.15	6,365.1	
11	827	4,167.28	7,636.4	
12	888	6,030.08	10,286.5	
13	10,380	75.00	10.9	Upper Marker

Region table for sample 11 : IR50-5 1mm

From [bp]	To [bp]	Average Size [bp]	Molarity [pmol/l]	Conc. [pg/µl]	Corr. Area	% of Total	Size distribution in CV [%]	Color
325	432	383	49,524.4	12,515.86	58.5	41	1.2	

Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

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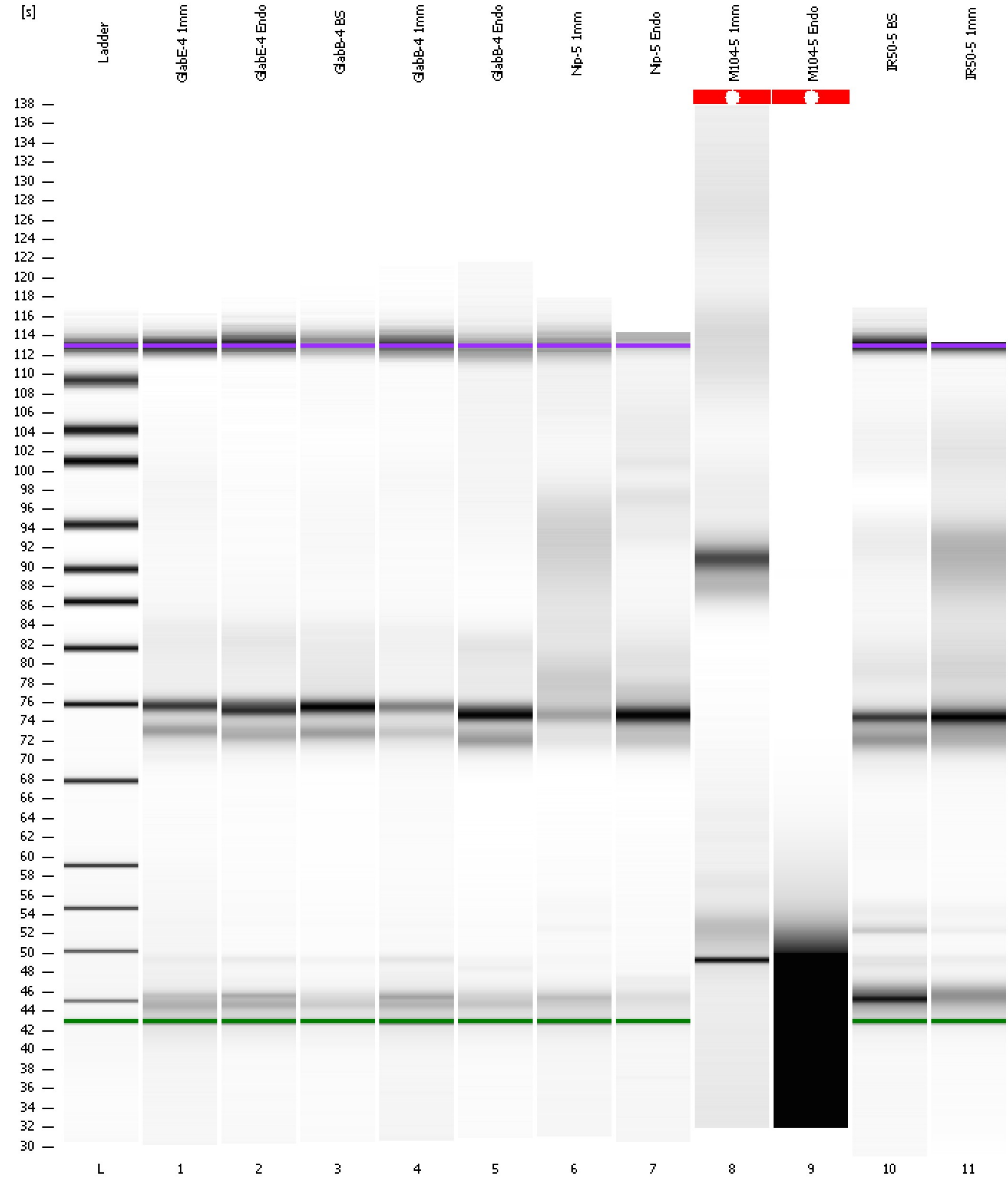
Gel Image



Assay Class: High Sensitivity DNA Assay
Data Path: C:\...ents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad

Created: 5/23/2013 3:19:38 PM
Modified: 5/23/2013 4:04:25 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		5/23/2013 4:00:56 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Run started on port 1 (File: C:\Documents and Settings\Bioanalyzer\2013-05-23\2013-05-23_005.xad)		Instrument	Run		5/23/2013 3:19:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Product Number : G2938B		Instrument	Run		5/23/2013 3:19:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Name :		Instrument	Run		5/23/2013 3:19:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Vendor : Agilent Technologies		Instrument	Run		5/23/2013 3:19:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Serial# : DE13701086		Instrument	Run		5/23/2013 3:19:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Firmware : C.01.069		Instrument	Run		5/23/2013 3:19:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1
Cartridge : Electrode		Instrument	Run		5/23/2013 3:19:44 PM	(GMT --07:00) Pacific Standard Time	UC Davis	D8XSMGH1