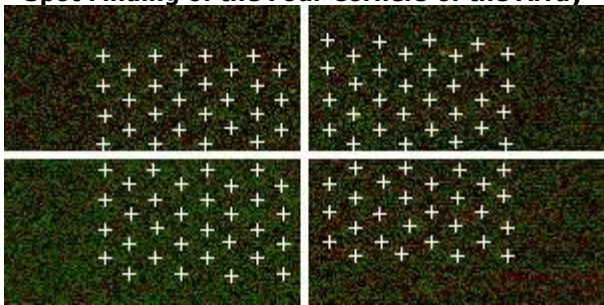


QC Report - Agilent Technologies : 2 Color Gene Expression

QCMetrics InRange (10 of 12)

Date	Tuesday, December 02, 2008 - 15:56	BG Method	No Background
Image	167-201-xdr_251485038759_S01_H [1_4]	Background Detrend	On(FeatNCRRange, LoPass)
Protocol	GE2-v5_95_Feb07 (Read Only)	Multiplicative Detrend	True
User Name	scan	Dye Norm	Linear Lowess
Grid	014850_D_F_20060807	Linear DyeNorm Factor	374(Red) 204(Green)
FE Version	9.5.3.1	Additive Error	570(Red)551(Green)
		Saturation Value	65287 (r), 65316 (g)

Spot Finding of the Four Corners of the Array

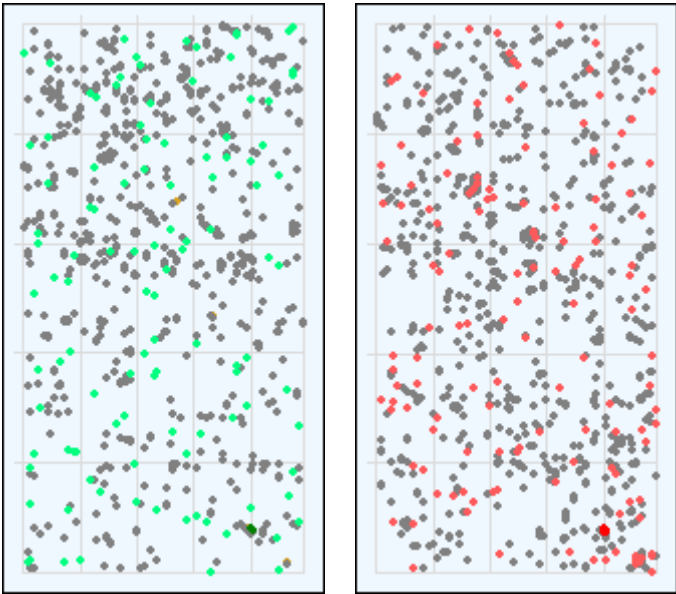


Evaluate Grid

Feature	Local Background	
	Red	Green
Non Uniform	4	2
Population	137	110

Spatial Distribution of All Outliers on the Array

532 rows x 85 columns



FeatureNonUnif (Red or Green) = 4(0.01%)

GeneNonUnif (Red or Green) = 4 (0.010 %)

- BG NonUniform ● BG Population
- Red FeaturePopulation ● Red Feature NonUniform
- Green FeaturePopulation ● Green Feature NonUniform

Net Signal Statistics

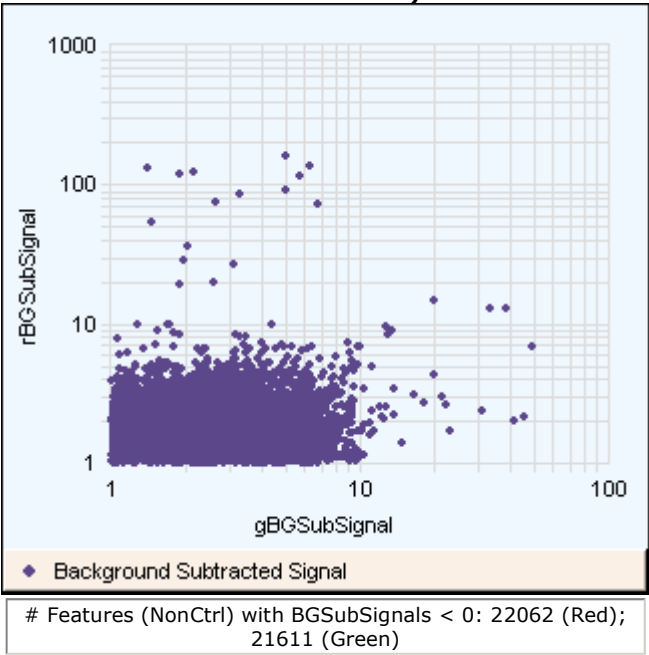
Agilent SpikeIns:

	Red	Green
# Saturated Features	0	0
99% of Sig. Distrib.	25	21
50% of Sig. Distrib.	21	14
1% of Sig. Distrib.	17	8

Non-Control probes:

	Red	Green
# Saturated Features	0	1
99% of Sig. Distrib.	25	22
50% of Sig. Distrib.	21	15
1% of Sig. Distrib.	17	8

Red and Green Background Corrected Signals (Non-Control Inliers)



Negative Control Stats

	Red	Green
Average Net Signals	20.73	14.56
StdDev Net Signals	1.49	2.83
Average BG Sub Signal	-0.23	0.06
StdDev BG Sub Signal	1.48	2.75

Local Bkg (inliers)

	Red	Green
Number	44238	44341
Avg	60.53	52.80
SD	1.72	3.03

Foreground Surface Fit

	Red	Green
RMS_Fit	0.35	1.09
RMS_Resid	1.52	2.70
Avg_Fit	60.87	54.27

Reproducibility: %CV for Replicated Probes

Median %CV Signal (inliers)

	Non-Control probes		Agilent SpikeIns	
	Red	Green	Red	Green
BGSubSignal	-1.00	-1.00	-1.00	-1.00
ProcessedSignal	-1.00	-1.00	-1.00	-1.00

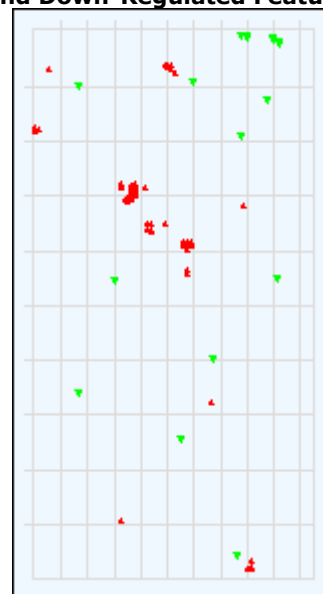
Array Uniformity: LogRatios

	Non-Control	Agilent SpikeIns
AbsAvgLogRatio	0.03	0.02
AverageS/N	0.30	0.18

Sensitivity:Agilent SpikeIns - Ratio of Signal to Background for 2 dimmest probes

(+)E1A_r60_n11		(+)E1A_r60_a97	
(g)	(r)	(g)	(r)
1.0	1.0	1.0	0.9

Spatial Distribution of Significantly Up-Regulated and Down-Regulated Features



#Up-Regulated:69 (Red) ; #Down-Regulated:18 (Green)

▲ Up-Regulated ▼ Down-Regulated

LogRatio Versus Log Processed Signal



Agilent SpikeIns Signal Statistics

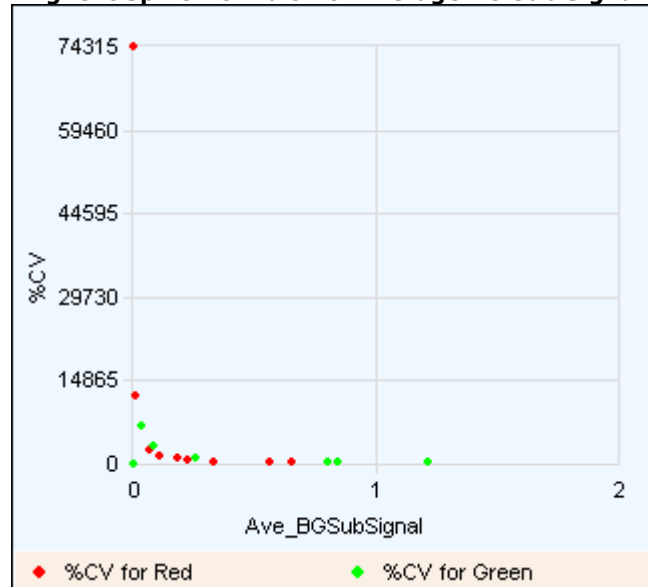
Probe Name	Exp	Obs	SD	S/N
(+)E1A_r60_n9	-1.00	0.01	0.09	0.11
(+)E1A_r60_a107	-0.48	0.04	0.11	0.32
(+)E1A_r60_a135	-0.48	0.01	0.17	0.07
(+)E1A_r60_n11	-0.48	0.02	0.11	0.20
(+)E1A_r60_1	0.00	0.08	0.17	0.46
(+)E1A_r60_a20	0.00	0.04	0.18	0.20
(+)E1A_r60_3	0.48	0.03	0.13	0.23
(+)E1A_r60_a104	0.48	0.00	0.10	0.03
(+)E1A_r60_a97	0.48	0.01	0.11	0.08
(+)E1A_r60_a22	1.00	0.01	0.17	0.08

Evaluation Metrics for GE2_QCMT_Feb07

Metric Name	Value	UpLim	LowLim	IsMandatory
AnyColorPrcntBGNonUnifOL	0.06	5.00	NA	False
AnyColorPrcntFeatNonUnif...	0.01	1.00	NA	False
absE1aObsVsExpCorr	0.01	NA	0.86	False
absE1aObsVsExpSlope	0.00	NA	0.85	False
gE1aMedCVBkSubSignal	-1.00	25.00	NA	False
gNegCtrlAveBGSubSig	0.06	10.00	-20.00	False
gNegCtrlSDvBGSubSig	2.75	15.00	NA	False
gNonCtrlMedCVBkSubSignal	-1.00	25.00	NA	False
rE1aMedCVBkSubSignal	-1.00	25.00	NA	False
rNegCtrlAveBGSubSig	-0.23	4.00	-20.00	False
rNegCtrlSDvBGSubSig	1.48	6.00	NA	False
rNonCtrlMedCVBkSubSignal	-1.00	25.00	NA	False

◆ In Normal Range ◆ Evaluate

Agilent SpikeIns: % CV of Average BG Sub Signal



Agilent SpikeIns: Expected LogRatio Vs Observed LogRatio

