

Microarray Quality Control Analysis Report

(Genotypic Project No: SO_8409)



For
Dr. Shivang

Index

Content	Page#
Microarray Project Plan	3
Total RNA Quality Control	4
Labeling Quality Control	4
Image Quality Control	6

Microarray Project Plan

- **Organism:** Human
- **Slides:** Human 8X60K GXP **AMADID:**072363
- **Starting material:** RNA
- **Labeling kit:** Agilent's Quick-Amp labeling Kit (p/n:5190-0442)
- **Labeling Method:** T7 promoter based-linear amplification to generate labeled complementary RNA (One-Color Microarray-Based Gene Expression Analysis)
- **Total RNA and cRNA Purification Kit:** Qiagen's RNeasyminikit Cat#74106
- **Hybridization Kit:** Agilent's In situ Hybridization kit 5190-6420.
- RNA quality was checked using Bioanalyzer

Total RNA Quality Control

Please refer to the folder “Bioanalyzer_Reports_SO_8409” containing “RNA QC report_SO_8409.pdf” and “Bioanalyzer Profile SO_8409.pdf” for samples.

Labeling Quality Control

Labeling QC to check incorporation of Cy3 of labeled RNA

Samples were labeled using the Agilent Quick-Amp labeling Kit. QC was performed using Nanodrop.

Nanodrop Analysis of labeled cRNA

Sample Details	Dye	pmol/μl	ng/μl	260/280	Specific Activity
NG_1	Cy3	0.6	56.8	2.37	10.56
NG_2	Cy3	0.6	65	2.29	9.23
NG+I_1	Cy3	0.9	52.5	2.44	17.14
NG+I_2	Cy3	0.7	62.9	2.26	11.13
HG_1	Cy3	0.6	72.5	1.92	8.28
HG_2	Cy3	0.7	64.4	2.32	10.87
HG+I_1	Cy3	0.7	64.8	2.19	10.80
HG+I_2	Cy3	0.6	49.9	2.2	12.02

**Note: Specific Activity greater than 8.0 is Good.
Specific Activity 5.0 to 8.0 is Optimal.**

Specific Activity less than 5.0 is not suitable for Hybridization

Comments: The amplified and labeled cRNA is suitable for Hybridization.

Hybridization Design

Slide ID	Sample Hybridised
257236322271_1_1	NG_1
257236322271_1_2	NG_2
257236322271_1_3	NG+I_1
257236322271_1_4	NG+I_2
257236322271_2_1	HG_1
257236322271_2_2	HG_2
257236322271_2_3	HG+I_1
257236322271_2_4	HG+I_2

Image Quality control

Image Quality Control: The images were manually verified and found to be devoid of uneven hybridization, streaks, blobs and other artifacts. Hybridization across the slide was good based on number of feature that were “g is PosAndSignif” which indicates feature is positive and significantly above background.

Comments: The microarray images were overall clean and with very low background noise.

End of Quality Control Report

For queries and clarifications on data analysis report / discuss new projects:

services@genotypic.co.in, contact@genotypic.co.in

Tel: +91- 80- 40538200 AND +91- 80- 23516444 Telefax: +91- 80- 40538222

USA / International Hotline: +1-(215) 253 4495 Web: www.genotypic.co.in