



Figure 3 Microarray differential gene expression experiment steps

Processing of cellular extracts from two tissue samples (A and B) to obtain a mixture of total mRNA, which is then purified and converted to cDNA by reverse transcriptase. The cDNA in each sample is labeled with a fluorescent dye unique to that sample (Cy3 and Cy5) and the samples are then mixed and hybridized to the microarray. After washing, the array is scanned using excitation for both dyes and data analysis is performed. The data for the two dyes is combined and for each of the microarray spots, the relative intensity of each of the dyes is measured and the relative abundance of each mRNA is calculated.