

Description of column titles :

Product :Sample name

1-p value : 1 minus the value of the probability of significance

Average, normalized log ratios : Average of the normalized log Cy5 to Cy3 values.

Details :

For each spot, the log base 2 of the ratio of the median intensity of Cy5 to Cy3 (M) was calculated. Normalisation by the lowess method across an array was done using the Bioconductor LIMMA package (1). Scale normalization across slides was also performed (2). Peak detection was performed as follows: First, the average value of M for each of the fragments, i , on a slide, \overline{M}_i , was calculated. Then, for each slide, the average and standard deviation of the \overline{M}_i , \overline{M}_{all} and $\sigma_{\overline{M}_i}$, respectively, were calculated. The \overline{M}_i were centered around zero, with a constant standard deviation, σ , by means of the following relationship:

$$M_{i_c} = \{ (\overline{M}_i - \overline{M}_{all}) / \sigma_{\overline{M}_i} \} \sigma$$

where σ is the geometric mean of the $\sigma_{\overline{M}_i}$ ($\sigma = \sqrt[N]{\prod_{i=1}^N \sigma_{\overline{M}_i}}$).

Finally, for each series of experiments (Cdc6 exponential phase, Cdc6 stationary phase, Mcm exponential phase, Mcm stationary phase), the average M_{i_c} and its standard deviation, \overline{M}_c and $\sigma_{\overline{M}_c}$, respectively, were determined.

Student t-tests comparing the \overline{M}_i value of each fragment to the mean of all the spots was performed independently for each slide. Associated p-values were calculated and the minimum p-value is used to indicate the degree of significance of each fragment. Selected peaks ($1-p > 0.95$) and the associated values of \overline{M}_c and $\sigma_{\overline{M}_c}$.

References :

1. Gentleman, R. C., Carey, V. J., Bates, D. M., Bolstad, B., Dettling, M., Dudoit, S., Ellis, B., Gautier, L., Ge, Y., Gentry, J., Hornik, K., Hothorn, T., Huber, W., Iacus, S., Irizarry, R., Leisch, F., Li, C., Maechler, M., Rossini, A. J., Sawitzki, G., Smith, C., Smyth, G., Tierney, L., Yang, J. Y. & Zhang, J. (2004) *Genome Biol* **5**, R80.
2. Yang, Y. H., Dudoit, S., Luu, P., Lin, D. M., Peng, V., Ngai, J. & Speed, T. P. (2002) *Nucleic Acids Res* **30**, e15.