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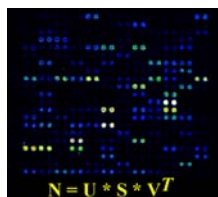
Methods for Reducing Noise in Analytical Assays

Technology Reference
R029

Keywords
Research Tool

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Field
Neurological Sciences

PATENT
Published US Patent Application
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Cross Reference
This invention is related to discoveries R031, R033, R244

AREAS OF APPLICATION

The identification and quality assessment of experimentally significant data points in large comparative data matrices.

- Gene expression profiling
- Protein expression profiling
- Nucleic acid sequence profiling
- Recovery of low frequency relevant data points from large paired data sets

ADVANTAGES

- Applicable to any type of data set comprised of four or more replicates
- Potentially reduces the need for confirmatory and/or repeated assays

THE TECHNOLOGY

This invention comprises methods and algorithms for reducing the effects of noise in replicate assays by filtering the data into two groups, one of which predominantly contains valid data and the other of which contains predominantly noise; creating a model of the noise represented by the second group of data; and using the noise model to correct the data in the first group. This method is particularly applicable to data such as that produced by gene arrays where large numbers of replicate tests are performed concurrently.

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