

NimbleGen Gene Expression 12x135K Arrays

Cost-effective, whole-transcriptome profiling

Multiplex Microarray Analysis

NimbleGen 12x135K arrays for gene expression analysis enable you to conveniently and simultaneously hybridize 12 independent samples on each slide. This microarray format combines a multiplex option with the unique combination of high-probe density and long-oligonucleotide probes to provide an ideal platform for sensitive and accurate whole-transcriptome analysis that can identify differentially regulated mRNAs. Choose from ten catalog designs built from the latest sequence databases, or custom design the best array for your experiment.

Advantages

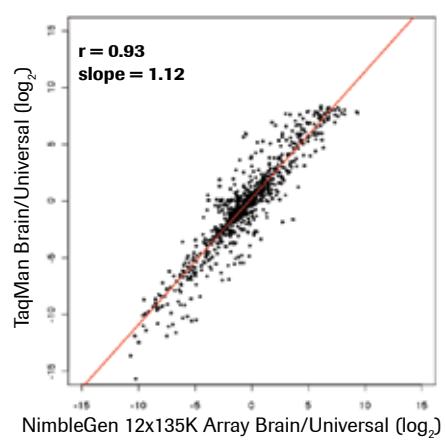
- **Comprehensive Up-to-date Coverage:** Obtain the most current expression profiles with 135,000 probes, targeting the latest genome builds.
- **Accurate Gene Expression Data:** Achieve sensitive, reproducible, and accurate expression profiles with multiple 60-mer probes per target.
- **Cost-Effective Solution:** Increase throughput and reduce cost by simultaneously analyzing 12 samples on a single slide.
- **Flexible Array Processing Options:** Perform array experiments in your laboratory or core facility using our protocols, reagents, and equipment. Alternatively, send us your RNA or cDNA samples for processing in our full service laboratory.

For life science research only.
Not for use in diagnostic procedures.

Performance Data

The high-quality of gene expression data obtained with NimbleGen Gene Expression 12x135K microarrays was demonstrated using the universal human reference (Stratagene) and human brain reference (Ambion) RNA samples used in the Microarray Quality Control Consortium (MAQC) study (Nature Biotechnology, 2006, 24:1151). Total RNA was converted to cDNA, labeled with Cy3, and hybridized to the NimbleGen Human Gene Expression 12x135K microarray using the NimbleGen Gene Expression protocol.

Highly precise gene expression profiles achieved with these arrays are evidenced by median CV values lower than 5% and interarray reproducibility of 0.99 (N=9) for both reference samples. The accuracy of the microarray data is shown by the high concordance achieved for brain to universal fold-change values between NimbleGen Human Gene Expression 12x135K microarray and TaqMan® data obtained from the MAQC report.



▲ **Achieve high accuracy with NimbleGen high-density Gene Expression arrays.** Highly accurate gene expression profiles achieved with NimbleGen Human Gene Expression 12x135K array and the MS 200 scanner are evidenced by the high concordance with TaqMan® data (MAQC report, *Nature Biotechnology*, 2006, 24:1151). Fold-change analysis of 961 genes in brain and universal reference RNA shows strong correlation and linearity.

NimbleGen Gene Expression 12x135K Ordering Information

Microarray Specifications



Total probes	12 x 135,000
Probe length	60 mer
Feature size	13 µm x 13 µm
Array size	8.9 mm x 6.5 mm
Slide size	1 in x 3 in (25 mm x 76 mm) glass

Microarray Processing Reagents

NimbleGen One-Color DNA Labeling Kit	05 223 555 001
NimbleGen Sample Tracking Control Kit	05 223 512 001
NimbleGen Hybridization Kit	05 583 683 001
NimbleGen Hybridization Kit, LS (Large Scale)	05 583 934 001
NimbleGen Wash Buffer Kit	05 584 507 001
NimbleGen Array Processing Accessories Kit	05 223 539 001

Cat. No.

Available Designs

D Delivery Cat. No.	S Service Cat. No.	Organism	Build	Target Genes	Probes per Target (Replicate Probe Sets per Array)
05 543 789 001	05 545 803 001	Human	HG18	44,049	3 (1)
05 543 797 001	05 545 811 001	Mouse	MM9	44,170	3 (1)
05 543 827 001	05 545 838 001	Rat	RGSC 3.4	26,419	5 (1)
05 543 851 001	05 545 862 001	Zebrafish	Zv7	38,489	3 (1)
05 543 819 001	05 545 820 001	Populus	2008	48,276	3 (1)
05 543 746 001	05 545 773 001	<i>A. thaliana</i>	TAIR 9.0	39,042	4 (1)
05 543 754 001	05 545 781 001	<i>C. elegans</i>	WS 190	23,187	6 (1)
05 543 762 001	05 545 790 001	<i>D. melanogaster</i>	DM5.7	16,637	8 (1)
05 543 835 001	05 545 846 001	<i>S. cerevisiae</i>	NCBI June 2008	5,777	8 (3)
05 543 843 001	05 545 854 001	<i>S. pombe</i>	NCBI June 2008	4,942	9 (3)

D = Delivery Array (Array is delivered to you. You run the experiment.) **S** = Service Array (Data are delivered to you. Roche NimbleGen runs the experiment as service.)



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