

## SCHOTT GLASS

### 2006

Kaech S, Banker G.  
Culturing hippocampal neurons  
Nat Protoc. 2006; 1(5):2406-2415

Type of experiment: Cell culture on polylysine-treated D-glass  
Probe: -  
Target: -

### 2007

Harbers GM, Emoto K, Greef C, Metzger SW, Woodward HN, Mascali JJ, Grainger DW, Lochhead MJ  
Functionalized Poly(ethylene glycol)-Based Bioassay Surface Chemistry That Facilitates Bio-Immobilization and Inhibits Nonspecific Protein, Bacterial, and Mammalian Cell Adhesion  
Chem Mater. 2007; 19(18):4405-4414

Type of experiment: PEG coated D-glass  
Probe: -  
Target: -

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Saldarriaga Fernández IC, van der Mei HC, Lochhead MJ, Grainger DW, Busscher HJ  
The inhibition of the adhesion of clinically isolated bacterial strains on multi-component cross-linked poly(ethylene glycol)-based polymer coatings  
Biomaterials. 2007; 28(28):4105-4112

Type of experiment: PEG coated D-glass  
Probe: -  
Target: -

### 2008

Takahashi H, Emoto K, Dubey M, Castner DG, Grainger DW  
Imaging Surface Immobilization Chemistry: Correlation with Cell Patterning on Non-Adhesive Hydrogel Thin Films  
Adv Funct Mater. 2008; 18:1-10

Type of experiment: ?  
Probe: -  
Target: -



### NEXTERION® SLIDES

#### 2002

Kusnezow W, Hoheisel JD  
Antibody microarrays: promises and problems  
Biotechniques. 2002; Suppl:14-23

Type of experiment: technical review, no experiments  
Probe: -  
Target: -

### Nexterion® Slide AL

#### 2002

Lizcano JM, Deak M, Morrice N, Kieloch A, Hastie CJ, Dong L, Schutkowski M, Reimer U, Alessi DR  
Molecular basis for the substrate specificity of NIMA-related kinase-6 (NEK6). Evidence that NEK6 does not phosphorylate the hydrophobic motif of ribosomal S6 protein kinase and serum- and glucocorticoid-induced protein kinase in vivo  
J Biol Chem. 2002; 277(31):27839-27849

Type of experiment: enzymatic phosphorylation assay  
Probe: peptides  
Target: enzyme (kinase, phosphorylation with [ $\gamma$ -<sup>32</sup>P]ATP)

#### 2004

Panse S, Dong L, Burian A, Carus R, Schutkowski M, Reimer U, Schneider-Mergener J  
Profiling of generic anti-phosphopeptide antibodies and kinases with peptide microarrays using radioactive and fluorescence-based assays  
Mol Divers. 2004; 8(3):291-299

Type of experiment: Enzyme assay  
Probe: peptides  
Target: kinases, antibodies

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Blank K, Lankenau A, Mai T, Schiffmann S, Gilbert I, Hirler S, Albrecht C, Benoit M, Gaub HE, Clausen-Schaumann H  
Double-chip protein arrays: force-based multiplex sandwich immunoassays with increased specificity  
Anal Bioanal Chem. 2004; 379(7-8):974-981

Type of experiment: immunoassay  
Probe: antibodies  
Target: antibody-avidin-DNA-conjugate

Bahi A, Boyer F, Gumy C, Kafri T, Dreyer JL



## Scientific Publications

Last update: 11-01-2009

In vivo gene delivery of urokinase-type plasminogen activator with regulatable lentivirus induces behavioural changes in chronic cocaine administration  
Eur J Neurosci. 2004; 20(12):3473-3488

Type of experiment: gene expression analysis  
Probe: oligonucleotides (Operon 70mers)  
Target: cDNA (Cy3- and Cy5-dCTP)

### 2005

Egener T, Roulet E, Zehnder M, Bucher P, Mermod N  
Proof of concept for microarray-based detection of DNA-binding oncogenes in cell extracts  
Nucleic Acids Res. 2005; 33(8):e79

Type of experiment: DNA-binding assay  
Probe: oligonucleotides  
Target: proteins

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Guillaume B, Bunes A, Schmidt C, Klimek F, Moldenhauer G, Huber W, Arlt D, Korf U, Wiemann S, Poustka A  
Systematic comparison of surface coatings for protein microarrays.  
Proteomics. 2005; 5(18):4705-4712

Type of experiment: Comparison of different surface coatings for protein microarrays  
Probe: monoclonal antibodies, recombinant fusion proteins  
Target: dye labelled antibodies

### 2007

Wang J, Jemielity S, Uva P, Wurm Y, Gräff J, Keller L  
An annotated cDNA library and microarray for large-scale gene-expression studies in the ant  
*Solenopsis invicta*  
Genome Biol. 2007; 8(1):R9

Type of experiment: gene expression analysis  
Probe: PCR products  
Target: cDNA

### 2009

Monson CF, Driscoll LN, Bennion E, Miller CJ, Majda M  
Antibody–Antigen Exchange Equilibria in a Field of an External Force: Design of Reagentless Biosensors  
Anal. Chem. 2009, 81(17):7510–7514

Type of experiment: immunogenic protein sensor based on superparamagnetic microbeads  
Probe: antibodies  
Target: proteins



### Nexterion® Slide E

#### 2003

Kusnezow W, Jacob A, Walijew A, Diehl F, Hoheisel JD  
Antibody microarrays: an evaluation of production parameters  
Proteomics. 2003; 3(3):254-264

Type of experiment: antibody array (optimization of experimental parameters and test of various surface chemistries)

Probe: antibodies

Target: labeled antigens

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Halitschke R, Gase K, Hui D, Schmidt DD, Baldwin IT  
Molecular interactions between the specialist herbivore *Manduca sexta* (Lepidoptera, Sphingidae) and its natural host *Nicotiana attenuata*. VI. Microarray analysis reveals that most herbivore-specific transcriptional changes are mediated by fatty acid-amino acid conjugates  
Plant Physiol. 2003; 131(4):1894-1902

Type of experiment: gene expression analysis (*Nicotiana attenuata*)

Probe: PCR products

Target: labeled cDNA (aminoallyl-protocol)

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Schlingemann J, Hess J, Wrobel G, Breitenbach U, Gebhardt C, Steinlein P, Kramer H, Furstenberger G, Hahn M, Angel P, Lichter P  
Profile of gene expression induced by the tumour promoter TPA in murine epithelial cells  
Int J Cancer. 2003; 104(6):699-708

Type of experiment: gene expression analysis

Probe: PCR products

Target: labeled cDNA (Cy3- and Cy5-dUTP)

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Wrobel G, Schlingemann J, Hummerich L, Kramer H, Lichter P, Hahn M  
Optimization of high-density cDNA-microarray protocols by 'design of experiments'  
Nucleic Acids Res. 2003; 31(12):e67

Type of experiment: gene expression analysis (optimization of experimental parameters and test of various surface chemistries)

Probe: PCR products

Target: labeled cDNA (Cy3- and Cy5-dUTP)



## Scientific Publications

Last update: 11-01-2009

Izaguirre MM, Scopel AL, Baldwin IT, Ballare CL.  
Convergent responses to stress. Solar ultraviolet-B radiation and *Manduca sexta* herbivory elicit overlapping transcriptional responses in field-grown plants of *Nicotiana longiflora*.  
Plant Physiol. 2003; 132(4):1755-1767

Type of experiment: gene expression analysis (*Nicotiana longiflora*)  
Probe: PCR products  
Target: labeled cDNA (aminoallyl-protocol)

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Toegl A, Kirchner R, Gauer C, Wixforth A  
Enhancing results of microarray hybridizations through microagitation  
J Biomol Tech. 2003; 14(3):197-204

Type of experiment: hybridization method, gene expression analysis (rat liver and kidney)  
Probe: oligonucleotides (50mer)  
Target: labeled cDNA

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Blank K, Mai T, Gilbert I, Schiffmann S, Rankl J, Zivin R, Tackney C, Nicolaus T, Spinnler K, Oesterhelt F, Benoit M, Clausen-Schaumann H, Gaub HE  
A force-based protein biochip  
Proc Natl Acad Sci U S A. 2003; 100(20):11356-11360

Type of experiment: differential force test  
Probe: proteins (antibodies, streptavidin)  
Target: oligonucleotides

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Striebel HM, Birch-Hirschfeld E, Egerer R, Foldes-Papp Z  
Virus diagnostics on microarrays  
Curr Pharm Biotechnol. 2003; 4(6):401-415

Type of experiment: Virus diagnostics (*Herpes simplex*)  
Probe: oligonucleotides  
Target: labeled PCR-product (with labeled PCR-primers)

## 2004

Lou Y, Baldwin IT  
Nitrogen supply influences herbivore-induced direct and indirect defenses and transcriptional responses in *Nicotiana attenuata*  
Plant Physiol. 2004; 135(1):496-506

Type of experiment: gene expression analysis (*Nicotiana attenuata*)  
Probe: oligonucleotides (50mer)  
Target: labeled cDNA (aminoallyl-protocol)



## Scientific Publications

Last update: 11-01-2009

Niehus E, Gressmann H, Ye F, Schlapbach R, Dehio M, Dehio C, Stack A, Meyer TF, Suerbaum S, Josenhans C  
Genome-wide analysis of transcriptional hierarchy and feedback regulation in the flagellar system of *Helicobacter pylori*  
Mol Microbiol. 2004; 52(4):947-961

Type of experiment: gene expression analysis (*Helicobacter pylori*)  
Probe: PCR products  
Target: labeled cDNA

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Schmidt DD, Kessler A, Kessler D, Schmidt S, Lim M, Gase K, Baldwin IT  
Solanum nigrum: a model ecological expression system and its tools  
Mol Ecol. 2004; 13(5):981-995

Type of experiment: gene expression analysis (*Solanum nigrum*)  
Probe: oligonucleotides  
Target: labeled cDNA (aminoallyl-protocol)

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Esposito I, Bauer A, Hoheisel JD, Kleeff J, Friess H, Bergmann F, Rieker RJ, Otto HF, Kloppel G, Penzel R  
Microcystic tubulopapillary carcinoma of the pancreas: a new tumor entity?  
Virchows Arch. 2004; 444(5):447-453

Type of experiment: gene expression analysis  
Probe: PCR products  
Target: cDNA (Cy3- and Cy5-dCTP)

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Boverhof DR, Fertuck KC, Burgoon LD, Eckel JE, Gennings C, Zacharewski TR  
Temporal- and dose-dependent hepatic gene expression changes in immature ovariectomized mice following exposure to ethynyl estradiol  
Carcinogenesis. 2004; 25(7):1277-1291

Type of experiment: gene expression analysis (mouse)  
Probe: PCR products  
Target: labeled cDNA (Cy3- and Cy5-dUTP)

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Sun YV, Boverhof DR, Burgoon LD, Fielden MR, Zacharewski TR  
Comparative analysis of dioxin response elements in human, mouse and rat genomic sequences  
Nucleic Acids Res. 2004; 32(15):4512-4523

Type of experiment: gene expression analysis  
Probe: PCR products  
Target: cDNA (Cy3- and Cy5-dUTP)

Tchinda J, Dijkhuizen T, Vlies Pv P, Kok K, Horst J



## Scientific Publications

Last update: 11-01-2009

Translocations involving 6p22 in acute myeloid leukaemia at relapse: breakpoint characterization using microarray-based comparative genomic hybridization  
Br J Haematol. 2004; 126(4):495-500

Type of experiment: array CGH  
Probe: PCR products  
Target: genomic DNA (Cy3- and Cy5 labeled)

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Krol E, Becker A  
Global transcriptional analysis of the phosphate starvation response in *Sinorhizobium meliloti* strains 1021 and 2011  
Mol Genet Genomics. 2004; 272(1):1-17

Type of experiment: gene expression analysis  
Probe: oligonucleotides and PCR products  
Target: labeled cDNA (aminoallyl-protocol)

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Held M, Gase K, Baldwin IT  
Microarrays in ecological research: a case study of a cDNA microarray for plant-herbivore interactions  
BMC Ecol. 2004; 4:13

Type of experiment: gene expression analysis (*Nicotiana attenuata*)  
Probe: PCR products  
Target: cDNA (Cy3- and Cy5 labeled)

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Gutmann O, Niekrawietz R, Kuehlewein R, Steinert CP, Reinbold S, De Heij B, Daub M, Zengerle R  
Non-contact production of oligonucleotide microarrays using the highly integrated TopSpot nanoliter dispenser  
Analyst. 2004; 129(9):835-840

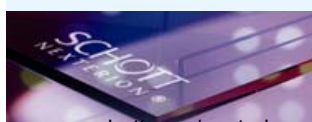
Type of experiment: method development (oligonucleotide microarray)  
Probe: oligonucleotides  
Target: biotinylated oligonucleotides and streptavidin-Cy5

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Striebel HM, Birch-Hirschfeld E, Egerer R, Foldes-Papp Z, Tilz GP, Stelzner A  
Enhancing sensitivity of human herpes virus diagnosis with DNA microarrays using dendrimers  
Exp Mol Pathol. 2004; 77(2):89-97

Type of experiment: virus diagnostics (Herpes)  
Probe: oligonucleotides  
Target: labeled PCR-product (with labeled dendrimeric PCR-primers)

Boverhof DR, Tam E, Harney AS, Crawford RB, Kaminski NE, Zacharewski TR



## Scientific Publications

Last update: 11-01-2009

Mol 2,3,7,8-Tetrachlorodibenzo-p-dioxin induces suppressor of cytokine signaling 2 in murine B cells

Pharmacol. 2004; 66(6):1662-1670

Type of experiment: gene expression analysis  
Probe: PCR products  
Target: cDNA (Cy3- and Cy5-dUTP)

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Foldes-Papp Z, Egerer R, Birch-Hirschfeld E, Striebel HM, Demel U, Tilz GP, Wutzler P  
Detection of multiple human herpes viruses by DNA microarray technology

Mol Diagn. 2004; 8(1):1-9

Type of experiment: virus diagnostics (Herpes)  
Probe: oligonucleotides  
Target: labeled PCR-product (with labeled PCR-primers)

### 2005

Schlingemann J, Thuerigen O, Ittrich C, Toedt G, Kramer H, Hahn M, Lichter P  
Effective transcriptome amplification for expression profiling on sense-oriented oligonucleotide microarrays.

Nucleic Acids Res. 2005; 33(3):e29

Type of experiment: gene expression analysis  
Probe: oligonucleotides (Operon 70mers)  
Target: cDNA (Cy3- and Cy5-dUTP)

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Martinez-Ramirez A, Urioste M, Melchor L, Blesa D, Valle L, de Andres SA, Kok K, Calasanz MJ, Cigudosa JC, Benitez J

Analysis of myelodysplastic syndromes with complex karyotypes by high-resolution comparative genomic hybridization and subtelomeric CGH array

Genes Chromosomes Cancer. 2005; 42(3):287-298

Type of experiment: Array CGH  
Probe: DOP-PCR products  
Target: genomic DNA (Cy3- and Cy5 labeled)



## Scientific Publications

Last update: 11-01-2009

Hohnjec N, Vieweg MF, Puhler A, Becker A, Kuster H  
Overlaps in the transcriptional profiles of *Medicago truncatula* roots inoculated with two different *Glomus* fungi provide insights into the genetic program activated during arbuscular mycorrhiza  
Plant Physiol. 2005;137(4):1283-1301

Type of experiment: gene expression analysis  
Probe: oligonucleotides (Operon 70mers)  
Target: cDNA (Cy3 and Cy5 labeled)

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Boverhof DR, Burgoon LD, Tashiro C, Chittim B, Harkema JR, Jump DB, Zacharewski TR  
Temporal and dose-dependent hepatic gene expression patterns in mice provide new insights into TCDD-Mediated hepatotoxicity  
Toxicol Sci. 2005; 85(2):1048-1063

Type of experiment: gene expression analysis  
Probe: PCR products  
Target: cDNA (Cy3- and Cy5-dUTP)

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Westra JL, Boven LG, van der Vlies P, Faber H, Sikkema B, Schaapveld M, Dijkhuizen T, Hollema H, Buys CH, Plukker JT, Kok K, Hofstra RM  
A substantial proportion of microsatellite-unstable colon tumors carry TP53 mutations while not showing chromosomal instability  
Genes Chromosomes Cancer. 2005; 43(2):194-201

Type of experiment: Array CGH  
Probe: DOP-PCR products  
Target: genomic DNA (Cy3- and Cy5 labeled)

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Zielinski B, Gratias S, Toedt G, Mendrzyk F, Stange DE, Radlwimmer B, Lohmann DR, Lichter P  
Detection of chromosomal imbalances in retinoblastoma by matrix-based comparative genomic hybridization  
Genes Chromosomes Cancer. 2005; 43(3):294-301

Type of experiment: Array CGH  
Probe: DOP-PCR products  
Target: genomic DNA (Cy3- and Cy5 labeled)



## Scientific Publications

Last update: 11-01-2009

Kok K, Dijkhuizen T, Swart YE, Zorgdrager H, van der Vlies P, Fehrmann R, te Meerman GJ, Gerssen-Schoorl KB, van Essen T, Sikkema-Raddatz B, Buys CH  
Application of a comprehensive subtelomere array in clinical diagnosis of mental retardation.  
Eur J Med Genet. 2005; 48(3):250-262

Type of experiment: CGH  
Probe: BAC/PAC  
Target: genomic DNA of patients with idiopathic mental retardation

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Fong CJ, Burgoon LD, Zacharewski TR  
Comparative microarray analysis of basal gene expression in mouse Hepa-1c1c7 wild-type and mutant cell lines  
Toxicol Sci. 2005; 86(2):342-353

Type of experiment: gene expression analysis  
Probe: PCR-products  
Target: cDNA (Cy3 and Cy5-dUTP)

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Schlingemann J, Habtemichael N, Ittrich C, Toedt G, Kramer H, Hambek M, Knecht R, Lichter P, Stauber R, Hahn M  
Patient-based cross-platform comparison of oligonucleotide microarray expression profiles  
Lab Invest. 2005 Aug;85(8):1024-1039.

Type of experiment: comparison of different microarray techniques  
Probe: 70mer oligonucleotides  
Target: Cy3- and Cy5-labelled cDNA

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Eady JJ, Wortley GM, Wormstone YM, Hughes JC, Astley SB, Foxall RJ, Doleman JF, Elliott RM  
Variation in gene expression profiles of peripheral blood mononuclear cells from healthy volunteers  
Physiol Genomics. 2005; 22(3):402-411

Type of experiment: gene expression analysis  
Probe: 70mer oligonucleotides (Operon human oligonucleotide set version 1.0)  
Target: cDNA (Cy3- and Cy5-labeled)

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Shingara J, Keiger K, Shelton J, Laosinchai-Wolf W, Powers P, Conrad R, Brown D, Labourier E  
An optimized isolation and labeling platform for accurate microRNA expression profiling  
RNA. 2005 Sep;11(9):1461-1470

Type of experiment: miRNA Array  
Probe: oligonucleotides  
Target: miRNA



## Scientific Publications

Last update: 11-01-2009

Guillaume B, Bunes A, Schmidt C, Klimek F, Moldenhauer G, Huber W, Arlt D, Korf U, Wiemann S, Poustka A

Systematic comparison of surface coatings for protein microarrays.  
Proteomics. 2005; 5(18):4705-4712

Type of experiment: Comparison of different surface coatings for protein microarrays  
Probe: monoclonal antibodies, recombinant fusion proteins  
Target: dye labelled antibodies

### 2006

Cherbas L, Bogart K, Zou Y, Cherbas P, Andrews J

DGRC-2: Spotted oligonucleotide transcriptome microarrays for the Drosophila community  
CGB Technical Report. 2006; 2006-01: DGRC-2

Type of experiment: oligonucleotide transcriptome microarrays, technology study  
Probe: PCR products from genomic DNA, oligonucleotides  
Target: labeled cDNA

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Gu J, Iyer VR

PI3K signaling and miRNA expression during the response of quiescent human fibroblasts to distinct proliferative stimuli  
Genome Biol. 2006; 7(5):R42

Type of experiment: gene expression analysis  
Probe: oligonucleotides  
Target: Cy3- and Cy5-labeled cDNA

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Atayar C, Kok K, Kluiver J, Bosga A, van den Berg E, van der Vlies P, Blokzijl T, Harms G, Davelaar I, Sikkema-Raddatz B, Martin-Subero JI, Siebert R, Poppema S, van den Berg A  
BCL6 alternative breakpoint region break and homozygous deletion of 17q24 in the nodular lymphocyte predominance type of Hodgkin's lymphoma-derived cell line DEV  
Hum Pathol. 2006; 37(6):675-683

Type of experiment: Array CGH  
Probe: PCR products derived from BACs/PACs  
Target: genomic DNA (Cy3- and Cy5-labeled)

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Taganov KD, Boldin MP, Chang KJ, Baltimore D

NF-kappaB-dependent induction of microRNA miR-146, an inhibitor targeted to signaling proteins of innate immune responses.  
PNAS 2006. 15;103(33):12481-12486

Type of experiment: expression profiling  
Probe: oligonucleotides  
Target: Cy3- and Cy5-labeled miRNA



## Scientific Publications

Last update: 11-01-2009

Han MK, Hong MY, Lee D, Lee DE, Noh GY, Lee JH, Kim SH, Kim HS  
Expression profiling of proteins in L-threonine biosynthetic pathway of Escherichia coli by using antibody microarray  
Proteomics. 2006; 6(22):5929-5940

Type of experiment: expression profiling  
Probe: antibodies  
Target: proteins

### 2007

McKessar SJ, Hakenbeck R  
The two-component regulatory system TCS08 is involved in cellobiose metabolism of Streptococcus pneumoniae R6  
J Bacteriol. 2007; 189(4):1342-1350

Type of experiment: transcription profiles  
Probe: 50mer oligonucleotides  
Target: Cy3- and Cy5-labeled cDNA

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Stoevesandt O, Kohler K, Wolf S, Andre T, Hummel W, Brock R  
A network analysis of changes in molecular interactions in cellular signaling  
Mol Cell Proteomics. 2007; 6(3):503-513

Type of experiment: protein interaction study (cell signalling)  
Probe: peptides  
Target: cell lysates

## Nexterion® Slide A+

### 2003

Albrecht C, Blank K, Lalic-Multhaler M, Hirler S, Mai T, Gilbert I, Schiffmann S, Bayer T, Clausen-Schaumann H, Gaub HE  
DNA: a programmable force sensor  
Science. 2003; 301(5631):367-370

Type of experiment: hybridization method, gene expression analysis (rat liver and kidney)  
Probe: oligonucleotides (50mer)  
Target: labeled cDNA



Hild M, Beckmann B, Haas SA, Koch B, Solovyev V, Busold C, Fellenberg K, Boutros M, Vingron M, Sauer F, Hoheisel JD, Paro R  
An integrated gene annotation and transcriptional profiling approach towards the full gene content of the *Drosophila* genome  
Genome Biol. 2003; 5(1):R3

Type of experiment: gene expression analysis (*Drosophila melanogaster*)  
Probe: PCR-product  
Target: labeled cDNA (aminoallyl-protocol)

### 2004

Kühner F, Costa LT, Bisch PM, Thalhammer S, Heckl WM, Gaub HE  
LexA-DNA bond strength by single molecule force spectroscopy  
Biophys J. 2004; 87(4):2683-2690.

Type of experiment: DNA binding assay  
Probe: protein  
Target: oligonucleotides

### 2005

Gutmann O, Kuehlewein R, Reinbold S, Niekrawietz R, Steinert CP, de Heij B, Zengerle R, Daub M  
Fast and reliable protein microarray production by a new drop-in-drop technique  
Lab Chip. 2005; 5(6):675-681

Type of experiment: method development protein microarray  
Probe: proteins  
Target: Cy5-labeled antibodies

### 2006

Crapoulet N, Barbry P, Raoult D, Renesto P  
Global transcriptome analysis of *Tropheryma whipplei* in response to temperature stresses  
J Bacteriol. 2006; 188(14):5228-5239

Type of experiment: gene expression analysis (*Tropheryma whipplei*)  
Probe: PCR products  
Target: Cy3- and Cy5-labeled cDNA



Lo M, Bulach DM, Powell DR, Haake DA, Matsunaga J, Paustian ML, Zuerner RL, Adler B.  
Effects of temperature on gene expression patterns in *Leptospira interrogans* serovar Lai as assessed by whole-genome microarrays  
Infect Immun. 2006; 74(10):5848-5859

Type of experiment: gene expression analysis (*Leptospira interrogans*)  
Probe: 70mer oligonucleotides  
Target: Cy3- and Cy5-labeled cDNA

### 2007

Shi C, Uzarowska A, Ouzunova M, Landbeck M, Wenzel G, Lubberstedt T  
Identification of candidate genes associated with cell wall digestibility and eQTL (expression quantitative trait loci) analysis in a Flint x Flint maize recombinant inbred line population  
BMC Genomics. 2007; 8:22

Type of experiment: macroarrays, expression analysis  
Probe: PCR products  
Target: Cy3- and Cy5-labeled mRNA

## Nexterion® Slide H

### 2004

Striebel HM, Schellenberg P, Grigaravicius P, Greulich KO  
Readout of protein microarrays using intrinsic time resolved UV fluorescence for label-free detection  
Proteomics. 2004; 4(6):1703-1711

Type of experiment: detection of protein-protein interaction  
Probe: protein  
Target: protein (unlabeled)

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Blixt O, Head S, Mondala T, Scanlan C, Huflejt ME, Alvarez R, Bryan MC, Fazio F, Calarese D, Stevens J, Razi N, Stevens DJ, Skehel JJ, van Die I, Burton DR, Wilson IA, Cummings R, Bovin N, Wong CH, Paulson JC  
Printed covalent glycan array for ligand profiling of diverse glycan binding proteins  
Proc Natl Acad Sci U S A. 2004; 101(49):17033-17038

Type of experiment: Analysis of glycan binding proteins (GBP)  
Probe: amine functionalized glycans or glycoconjugates (glycoproteins and glycolipides)  
Target: serum, labeled protein



Sieber SA, Mondala TS, Head SR, Cravatt BF  
Microarray platform for profiling enzyme activities in complex proteomes  
J Am Chem Soc. 2004; 126(48):15640-15641

Type of experiment: profiling enzyme activities  
Probe: antibodies  
Target: labeled proteins

### 2005

J Biol Chem. 2005; 280(6):4307-4312  
Bochner BS, Alvarez RA, Mehta P, Bovin NV, Blixt O, White JR, Schnaar RL  
Glycan array screening reveals a candidate ligand for Siglec-8

Type of experiment: ligand screening  
Probe: aminopropyl glycosides  
Target: protein

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Guillaume B, Bunniss A, Schmidt C, Klimek F, Moldenhauer G, Huber W, Arlt D, Korf U, Wiemann S, Poustka A  
Systematic comparison of surface coatings for protein microarrays.  
Proteomics. 2005; 5(18):4705-4712

Type of experiment: Comparison of different surface coatings for protein microarrays  
Probe: monoclonal antibodies, recombinant fusion proteins  
Target: dye labelled antibodies

### 2006

Hsu KL, Pilobello KT, Mahal LK  
Analyzing the dynamic bacterial glycome with a lectin microarray approach  
Nat Chem Biol. 2006; 2(3):153-157

Type of experiment: examination of bacterial glycans  
Probe: lectins  
Target: bacterial glycans

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Stevens J, Blixt O, Glaser L, Taubenberger JK, Palese P, Paulson JC, Wilson IA  
Glycan microarray analysis of the hemagglutinins from modern and pandemic influenza viruses reveals different receptor specificities  
J Mol Biol. 2006; 355(5):1143-1155

Type of experiment: receptor specificity profiling, mapping of pathogenic viruses  
Probe: carbohydrates and glycoproteins  
Target: virus



### 2007

Derwinska K, Gheber LA, Sauer U, Schorn L, Preininger C  
Effect of surface parameters on the performance of IgG-arrayed hydrogel chips: a comprehensive study  
Langmuir. 2007 23(21):10551-10558

Type of experiment: Comparison of different hydrogel surface coatings  
Probe: IgG  
Target:

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Wingren C, Ingvarsson J, Dexlin L, Szul D, Borrebaeck CA  
Design of recombinant antibody microarrays for complex proteome analysis: choice of sample labeling-tag and solid support  
Proteomics. 2007 7(17):3055-30

Type of experiment:  
Probe:  
Target:

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Derwinska K, Gheber LA, Preininger C  
A comparative analysis of polyurethane hydrogel for immobilization of IgG on chips  
Anal Chim Acta. 2007 592(2):132-138

Type of experiment:  
Probe:  
Target:

### 2008

Tao SC, Li Y, Zhou J, Qian J, Schnaar RL, Zhang Y, Goldstein IJ, Zhu H, Schneck JP  
Lectin microarrays identify cell-specific and functionally significant cell surface glycan markers  
Glycobiology. 2008 18(10):761-769

Type of experiment: Lectin binding assay for binary analysis of cell binding and hierarchical organization of mammalian cell lines  
Probe: lectins  
Target: cells



### Nexterion<sup>®</sup> MPX Slides

#### 2004

Conzone, S.D., Redkar, R.J  
Reproducible, Low Cost Arraying Achieved with a Multiplexed Approach  
European Pharmaceutical Review (2004) spring issue, pp 52-55

Type of experiment: multiplexed hybridization (comparison to single-slide hybridization)

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Conzone, S.D., Redkar, R.J  
Reproducible Multiplexed Microarray Approach  
Genetic Engineering News (2004) May 15, p 26

Type of experiment: multiplexed hybridization (comparison to single-slide hybridization)

#### 2005

Szemes M, Bonants P, de Weerd M, Baner J, Landegren U, Schoen CD  
Diagnostic application of padlock probes--multiplex detection of plant pathogens using universal microarrays  
Nucleic Acids Res. 2005; 33(8):e70

Type of experiment: detection of plant pathogens  
Probe: oligonucleotides  
Target: genomic DNA

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#### 2006

Redkar RJ, Schultz NA, Scheumann V, Burzio LA, Haines DE, Metwalli E, Becker O, Conzone SD  
Signal and sensitivity enhancement through optical interference coating for DNA and protein microarray applications  
J Biomol Tech. 2006; 17(2):122-130

Type of experiment: 1) gene expression analysis, 2) CGH, 3) protein  $\mu$ A  
Probe: 1) oligonucleotides, 2) oligonucleotides, 3) antibodies  
Target: 1) cDNA, 2) bacterial DNA, 3) human serum



## Scientific Publications

Last update: 11-01-2009

Ambion TechNotes. Aug 2006;13(3):17  
miRNA Expression Profiling  
[http://www.ambion.com/techlib/tn/133/AmbionTechNotes13\\_3.pdf](http://www.ambion.com/techlib/tn/133/AmbionTechNotes13_3.pdf)

Type of experiment: miRNA Expression Profiling  
Probe: amine-modified DNA oligonucleotides  
Target: miRNA

### 2008

Leberre V, Baranowski E, Deplanche M, Trouilh L, François JM.  
Detection of minority variants within bovine respiratory syncytial virus populations using oligonucleotide-based microarrays.  
J Virol Methods. 2008;148(1-2):271-276

Type of experiment: quantitative DNA microarray-based analyses of mutant genome distributions within viral populations  
Probe: oligonucleotides (14-23mer with 15nt poly dT)  
Target: PCR products of genome of bovine respiratory syncytial virus populations

## NEXTERION® BLOCKING SOLUTION

### 2003

Spiess AN, Mueller N, Ivell R  
Amplified RNA degradation in T7-amplification methods results in biased microarray hybridizations  
BMC Genomics. 2003; 4(1):44

Type of experiment: detection of bacterial pathogens  
Probe: oligonucleotides  
Target: biotinylated PCR products from genomic DNA

## NEXTERION® HYBRIDISATION SOLUTION

### 2005

Sachse K, Hotzel H, Slickers P, Ellinger T, Ehricht R.  
DNA microarray-based detection and identification of Chlamydia and Chlamydophila spp.  
Mol Cell Probes. 2005; 19(1):41-50.

Type of experiment: microarray based pathogen detection  
Probe: oligonucleotides  
Target: PCR products



## Scientific Publications

Last update: 11-01-2009

Westra JL, Boven LG, van der Vlies P, Faber H, Sikkema B, Schaapveld M, Dijkhuizen T, Hollema H, Buys CH, Plukker JT, Kok K, Hofstra RM

A substantial proportion of microsatellite-unstable colon tumors carry TP53 mutations while not showing chromosomal instability

Genes Chromosomes Cancer. 2005;43(2):194-201

Type of experiment: Array CGH  
Probe: DOP-PCR products  
Target: genomic DNA (Cy3- and Cy5-labeled)

## NEXTERION® SPOTTING SOLUTION

### 2003

Monecke S, Leube I, Ehricht R

DNA microarray-based detection and identification of Chlamydia and Chlamydophila spp

Genome Letters. 2003; 2:106–118

Type of experiment: methodology article (RNA amplification for microarray target preparation)  
Probe: oligonucleotides  
Target: labeled aRNA

### 2005

Sachse K, Hotzel H, Slickers P, Ellinger T, Ehricht R

DNA microarray-based detection and identification of Chlamydia and Chlamydophila spp.

Mol Cell Probes. 2005; 19(1):41-50

Type of experiment: microarray based pathogen detection  
Probe: oligonucleotides  
Target: PCR products

### 2008

Leberre V, Baranowski E, Deplanche M, Trouilh L, François JM

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