

Gene Expression Profiling Services—Microarray

To determine total cost for your experiment add the *Standard Service Charge (Table I)* to the cost of your desired array (**Table II**) and multiply the total by number of samples or arrays (2-color) in your experiment, then add charges for selected analyses.

Standard Service Charge covers RNA sample QC, labeling, hybridization, basic data processing, and quality control reporting.

For statistical analysis, select from the available Bioinformatics Modules listed in **Table III**.

Table I - Gene Expression Microarray Standard Service Charges
Fees are listed as price per sample or price/array (2-color service)

Number of Samples or Arrays (2-color)	1-Color Assay	2-Color Assay
6-11	\$440	\$550
12-23	\$370	\$475
24-47	\$336	\$436

Prices are given as per Sample, Add \$50 per sample for Affymetrix Microarrays

Table II - Available Microarrays

Available Microarrays	Description	Price per Array
Mouse MI-Ready Exonic Evidence—Based Oligonucleotide	38.5 K 70-mer spotted oligonucleotide microarray. Contains 35,078 Mouse-exon-centric probes. Best coverage of mouse genome, and best sensitivity with ORB optimized process. Manufacturer provided 100% quality control verification.	\$116
Human MI-Ready Exonic Evidence—Based Oligonucleotide	48.5 K 70-mer spotted oligonucleotide microarray. Contains 42,151 Human-exon-centric probes, including 8,441 probes targeting well-annotated alternatively spliced exons. ORB optimized processing, and 100% quality control verification.	\$131
Rat MI-Ready Operon-Designed Microarray	39K 70-mer spotted oligonucleotide microarray. Contains 34,585 unique rat probes for Ensembl transcripts. ORB optimized processing, and 100% quality control verification.	\$116
Agilent Whole Genome - 44K	44K feature 60-mer oligonucleotide microarrays fabricated by in situ synthesis. Versions Available for Human, Mouse, Rat, Chicken, and more.	\$257
Affymetrix 3' Gene Expression	Industry standard 25-mer in situ synthesized microarrays, with 22 probes per probe set and up to 54,000 probe sets per microarray. Versions available for Human (U133 Plus 2.0), Mouse (430 2.0), Rat (230 2.0), and many other species.	\$499
Affymetrix Gene 2.0 ST	In situ synthesized 25-mer microarrays containing >1.35 million probes divided in to ~48,000 gene-level probe sets (human version). Provides exon and gene-level data. Available for Human, Mouse, and Rat.	\$263
Affymetrix Human Transcriptome 2.0	More than 6 million distinct probes, 70% covering exons for coding transcripts, 30% cover exon-exon splice junctions and non-coding transcripts. Designed to cover ten probes/exon and four probes/splice junction.	\$341
Affymetrix Clariom D	Gene- and exon-level analysis with over 6.75 million probes to provide the deepest view into the transcriptome including coding and noncoding RNA isoforms. Available for Human, Mouse, and Rat.	\$300
Affymetrix Clariom S	Over 20,000 well-annotated genes measured via constitutively expressed exons with 10 probes per gene. Available for Human, Mouse, and Rat.	\$175

Table III - Data Analysis Services

Bioinformatics Services	Description	Price per Project
Statistical Analysis	Normalization, fold-change calculations, analysis of variance (ANOVA),	\$730
Pathway Analysis	Examine over-representation of differentially expressed genes based on up to 4 fold-change criteria using four pathway databases including GO, KEGG, Pathway	\$520
Other Custom Analyses	Please Inquire	\$110/hour

ORB's Signature Microarray-Based MicroRNA Profiling Service

MicroRNA Profiling at ORB is priced per sample as a complete package which includes the **ORB MirBASE Version 19 MicroRNA Microarray**, RNA sample quality testing, the option to replace any defective samples, labeling, hybridization, data QC report, data processing, statistical analysis, and full results package.

ORB MirBASE Version 19 MicroRNA Microarray provides complete coverage of mirBASE Release 19 for three major species, including coverage of 2,040 Human, 1,280 Mouse, and 723 Rat mature and minor-form(*) microRNAs. The array is triplicate spotted, optimized for maximal sensitivity, and contains numerous QC features.

MicroRNA Profiling Complete Package		
Number of Samples	Per Sample (Cellular RNA)	Per Sample (Biofluid RNA)
6-11	\$521	\$529
12-23	\$470	\$480
24-47	\$421	\$431

Prices are given as per Sample

Real-Time PCR Analysis Services

Calculate total cost using the following guide:

SABiosciences Pathway: Multiply number of samples by sum of cost for RNA QC + DNase Digestion + Random-primed cDNA Synthesis + SA Biosciences Pathway PCR Array charge.

ABI Taqman Gene Expression: Determine sample prep charge by multiplying number of samples by sum of cost for RNA QC + DNase Digestion + Random-primed cDNA Synthesis. Add cost of assay by multiplying total number of triplicate data points (genes x samples) by Taqman Gene Expression assay charge. Finally, add cost of ABI Taqman Gene Expression Assays (Primer/Probe sets, \$210 for up to 60 samples for each probe set).

ABI Taqman MicroRNA: Determine sample prep charge by multiplying number of samples by sum of cost for RNA QC + DNase Digestion. Add cost of assay by multiplying total number of triplicate data points (genes x samples) by sum of MicroRNA-Specific cDNA Synthesis and Taqman MicroRNA Assay charges. Finally, add cost of ABI MicroRNA Assays (Primer/ Probe Sets, \$210 for up to 45 samples for each probe set).

Sample Preparation for Real-Time PCR Per Sample Charges				
Number of Samples	RNA QC Testing & Report	DNase Digestion & Column Purification	DNase Digestion & Bead Purification	Random-primed cDNA Synthesis
6-11	\$37	\$73	\$42	\$63
12-23	\$25	\$66	\$38	\$41
24-47	\$16	\$61	\$36	\$26

1. ORB runs positive control RNA and negative control water wells in your Taqman experiments at no extra charge
2. Complete analysis included with your experiment at no extra charge.

SABiosciences Pathway PCR Array Per Sample Charges	
Number of Samples	Price per Sample (includes array)
6-11	\$494
12-23	\$473
24-47	\$452

ABI Taqman Real-Time PCR Gene Expression Assays Per Triplicate Data Point Charge	
Number of Triplicate Data Points	Taqman Gene Expression Assay
100-199	\$16
200-499	\$15
500-999	\$14
1000-4999	\$12

ABI Taqman Real-Time PCR MicroRNA Assays Per Triplicate Data Point Charges		
Number of Triplicate Data Points	MicroRNA-Specific cDNA Synthesis	Taqman MicroRNA Assay
100-199	\$15	\$17
200-499	\$12	\$14
500-999	\$9	\$11
1000-4999	\$7	\$9

Please Inquire about other quantities or Real-Time PCR assays (e.g. genotyping).

Supplementary Services for RNA Analysis

Table IV– Exosome Isolation Per Sample Charges			Table V– Biofluid Filtering Per Sample Charges			Table VI – RNA Isolation from Biofluids Per Sample Charges				
Number of Samples	Exosome Isolation (up to 1.0 mL)	Exosome Isolation (1.1 - 4.0 mL)	Number of Samples	Biofluid Filtering (1.0-1.5 mL)	Biofluid Filtering (0.3-0.7 mL)	Number of Samples	1200 ul	900 ul	600 ul	300 ul
6-11	\$98	\$121	6-11	\$13	\$8	6-11	\$116	\$97	\$77	\$58
12-23	\$85	\$97	12-23	\$11	\$7	12-23	\$105	\$87	\$70	\$53
24-47	\$75	\$86	24-47	\$10	\$6	24-47	\$95	\$79	\$63	\$47

Table VII - RNA Isolation Per Sample Charges								
Number of Samples	RNA Isolation Tissue (<= 100 mg)	Homogenization of Additional Tissue (up to 800 mg)	RNA Isolation Cells	RNA Isolation Whole Blood (PAXgene)	RNA Isolation FFPE	RNA Isolation Microparticles	RNA Isolation Exosomes (<=1ml biofluid)	RNA Isolation Exosomes (1.1- 4 ml biofluid)
6-11	\$87	\$29	\$54	\$95	\$67	\$37	\$42	\$52
12-23	\$79	\$26	\$49	\$87	\$50	\$25	\$37	\$41
24-47	\$73	\$13	\$45	\$72	\$46	\$23	\$32	\$37

Table VIII– RNA Enrichment, Amplification, and Quality Control Per Sample Charges									
Number of Samples	DNase Digestion & Column Purification ²	DNase Digestion & Bead Purification ²	Globin mRNA Depletion	Intermediate RNA Amplification (min.100 ng)	Low Input RNA Amplification (min. 5 ng)	Standard QC Testing & Report ¹	Low Input RNA QC (BioAnalyzer PicoChip & Riboquant)	Biofluid RNA QC (RT-qPCR)	Low Input RNA QC (Bioanalyzer)
6-11	\$73	\$42	\$139	\$110	\$414	\$37	\$87	\$116	\$58
12-23	\$66	\$38	\$125	\$100	\$375	\$25	\$76	\$99	\$53
24-47	\$61	\$36	\$110	\$88	\$336	\$18	\$64	\$81	\$46

¹, Included with gene expression and microRNA service. ², Included with microRNA service.

Luminex-Based Multiplex Protein Profiling Services
Table V - Millipore Stock and Disease-Area Multiplex Assays

Panel Name	Cost per Sample (20 sample minimum)	Cost per Sample (35 sample minimum)	Analytes
29-Plex Human Cytokine/ Chemokine	\$321	\$217	VEGF, EGF, Eotaxin, G-CSF, GM-CSF, IFN- α 2, IFN- γ , IL-1 α , IL-1 β , IL-1ra, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-10, IL-12 (p40), IL-12 (p70), IL-13, IL-15, IL-17, IP-10, MCP-1, MIP-1 α , MIP-1 β , TNF- α , and TNF- β
17-Plex Human Angiogenesis/ Growth Factor	\$237	\$158	Angiopoietin-2, BMP-9, EGF, Endoglin, Endothelin-1, FGF-1/FGF-acidic, FGF-2/FGF-basic, Follistatin, G-CSF, HB-EGF, HGF, IL-8/CXCL8, Leptin, Placental Growth Factor, VEGF-A, VEGF-C, VEGF-D
5-Plex Human MMP	\$114	\$84	MMP-1, MMP-2, MMP-7, MMP-9, MMP-10
25-Plex Human Circulating Cancer Biomarker	\$294	\$199	alpha-Fetoprotein, CA125, CA15-3, CA19-9, CEA, CYFRA21-1, sFas, sFasL, FGF-2/FGF-basic, HCGbeta, HE4, HGF, IL-6, IL8/CXCL8, Leptin, MIF, Osteopontin, Prolactin, PSA (free), PSA (Total), SCF, TGF-alpha, TNF-alpha, TRAIL/TNFSF10, VEGF-A
7-Plex Human Neurodegenerative Disease	\$138	\$97	alpha-2-Macroglobulin, Apo AI, Apo CIII, APO E, Complement C3, Complement Factor H, Pre-albumin/Transthyretin
9-Plex Human Adipokine	\$161	\$111	HGF, IL-1beta, IL-6, IL-8/CXCL8, Insulin, Leptin, MCP-1/
12-Plex Human Cardiovascular Disease	\$193	\$130	BNP, NT proBNP, CK-MB, LIX/CXCL6/GCP-2, CXCL16, Endocan (ESM-1), FABP3, FABP4, LIGHT, Oncostatin, Placental Growth Factor, Troponin I

Prices are given as per Sample.

Table VI - Custom Multiplex Protein Profiling Assays

Number of Analytes	Cost per Sample (20 sample minimum)	Cost per Sample (35 sample minimum)
1-Plex	\$64	\$42
2-Plex	\$82	\$70
3-Plex	\$100	\$83
4-Plex	\$112	\$91
5-Plex	\$125	\$101
6-Plex	\$137	\$108
7-Plex	\$150	\$116
8-Plex	\$162	\$126
9-Plex	\$175	\$133
10-Plex	\$187	\$142
11-Plex	\$199	\$148
12-Plex	\$210	\$156
13-Plex	\$221	\$162
14-Plex	\$230	\$169
15-Plex	\$241	\$175
16-Plex	\$250	\$184

Prices are given as per Sample

Table VI - Custom Multiplex Protein Profiling Assays

Number of Analytes	Cost per Sample (20 sample minimum)	Cost per Sample (35 sample minimum)
17-Plex	\$258	\$190
18-Plex	\$268	\$197
19-Plex	\$276	\$203
20-Plex	\$284	\$211
21-Plex	\$293	\$216
22-Plex	\$300	\$222
23-Plex	\$306	\$227
24-Plex	\$312	\$233
25-Plex	\$320	\$239
26-Plex	\$328	\$245
27-Plex	\$335	\$250
28-Plex	\$343	\$254
29-Plex	\$350	\$260
30-Plex	\$358	\$266
31-Plex	\$366	\$272
32-Plex	\$373	\$277
33-Plex	\$349	\$282

Prices are given as per Sample