



## Genomics Services

## Internal Customer Price List (USD)

### Sequencing: Standard and High Throughput

< 55 samples, sequencing - primer and template already added	12.00	Sample
PCR cleanup (ExoSAP)	2.00	Sample
≥ 55 samples, sequencing - primer and template already added	10.00	Sample
Five full plates/month, primer and template already added	8.00	Sample
PCR cleanup (ExoSAP)	2.00	Sample
12, 96 well plates in a week, sequencing (One primer)	5.50	Sample
PCR cleanup (ExoSAP)	1.50	Sample

### Larger volume projects may qualify for additional discount pricing

Capillary run only, plate drop off ready to run	150.00	Run
Capillary run only, plate drop off ready to run, ≥10 per month	120.00	Run
Capillary run only, plate drop off ready to run, ≥20 per month	100.00	Run

All sequencing is unidirectional with one template and primer. Full service sequencing uses ABI PRISM® Big Dye™. PCR cleanup uses Exonuclease I, Shrimp Alkaline Phosphatase (ExoSAP-It, USB). Samples <55 are run on an ABI 3100 DNA analyzer. Samples > 55 and capillary runs are run on an ABI 3730 DNA analyzer.

### Genotyping: Gene association, Genome wide scan, functional SNPs

#### Single Nucleotide Polymorphisms

**Affymetrix GeneChip Mapping Array (SNP chip)**, Fixed content SNP markers for genome wide scan linkage analysis and LOH.

Affymetrix SNP Chip 10K, 100K, 500K; we will provide Affymetrix pricing upon	POR	Chip
DNA preparation and labeling	300.00	Sample
Hybridization, scanning and data reporting	150.00	Sample

Discounts based on volume are available.

**Illumina Custom content SNP genotyping**, Oligo Pools (OPA) are ordered and supplied by the client. Minimum OPA pool will run 480 samples for 384 SNPs.

384plex SNP assay	POR
768plex SNP assay	POR
1536plex SNP assay	POR

Pricing varies based on sample number; please call to discuss your project. Cost per genotype ranges from \$0.05 and up for custom content.

**Illumina Linkage IV panel**, Fixed content 5861 SNP markers for genome wide scan linkage analysis

POR

**Taqman SNP genotyping**, Assay probes are provided by client. We recommend the use of Inventoried assays through Applied Biosystems. Please inquire for assistance.

>9 SNP assays, 1 SNP loci per 384 well plate (\$0.50/Genotype)	192.00	384 well plate
≤9 assays, 1 SNP loci per 384 well plate (\$0.65/Genotype)	250.00	384 well plate
> 1 SNP loci per plate (\$0.80/Genotype)	310.00	384 well plate

**Fragment analysis: STRP, primer extension, RFLP, AFLP**

LIZ dye standard & formamide addition to pre-pooled 96 well genotyping	50.00	96 well plate
LIZ dye standard & formamide addition, Pool up to 12, 96 well genotyping	75.00	96 well plate
Capillary run only, plate drop off ready to run	150.00	Run
Capillary run only, plate drop off ready to run, ≥10 per month	120.00	Run
Capillary run only, plate drop off ready to run, ≥20 per month	100.00	Run
Fluorescence polarization plate read, equipment run only,	10.00	96 well plate

All fragment analysis is performed on an ABI 3730 DNA analyzer

**Gene Expression:** RNA extraction available, See Specimen Processing

**Affymetrix GeneChip® Services**

GeneChips, Contact us for current UPitt chip pricing based on chip type	POR	
Labeling: cRNA preparation for hybridization	300.00	Sample
GeneChip Hybridization, wash and stain, scanning and primary data	150.00	Chip
Software analysis	50.00	Hour

**Illumina Gene Expression**

Whole Genome Gene Expression 24K transcripts	POR	
Whole Genome Gene Expression 48K transcripts	POR	
DASL for RNA from formalin fixed tissue, up to 512 genes	POR	
Custom Arrays, up to 512 genes	POR	

**Taqman® Real time PCR:** All prices assume that primers and probes are provided by client. RNA extraction is available through our specimen processing laboratory.

Instrument run (7900HT), 96 or 384 well plates	30.00	Plate
Instrument run (7900HT), Low density Array (384 well microfluidics card)	75.00	Plate
Taqman® Realtime PCR reaction setup for Low density Array (384 well microfluidics card, Includes instrument run)	180.00	Plate
Taqman® Realtime PCR reaction setup, 96 well plates only (includes instrument run)	528.00	Plate
Taqman® Realtime PCR reaction setup (not including instrument run)	6.00	Well
Reverse transcription (RT) for Taqman® analysis	15.00	RT

We recommend the use of Inventoried assays through Applied Biosystems for gene expression assays by Taqman. Please inquire for assistance.

## Specimen Processing

### DNA/RNA extraction

**DNA Extraction, Genra PureGene method:** Recommended for fresh whole blood and cells. DNA yields for whole blood are 20-70 ug/ml. Average expected yield is 30ug/ml.

3 ml whole blood	30.00	Sample
6 ml whole blood	35.00	Sample
9 ml whole blood	40.00	Sample
≤10 <sup>7</sup> cells, Cell culture	25.00	Sample
Buccal Brush	20.00	brush
Buccal Brush, pool multiple brushes per subject	15.00	brush
Mouthwash, 2X10 ml tubes of buccal cells in mouthwash per sample	50.00	Sample
High throughput DNA extraction	POR	

**DNA Extraction, Qiagen column method:** Recommended for frozen whole blood. DNA yields for whole blood are 20-70 ug/ml. Average expected yield is 30ug/ml.

0.2 ml whole blood, single tubes	30.00	Sample
0.2 ml whole blood, 96 well plate format (~\$10/sample)	1000.00	96 well plate
≤2ml whole blood	35.00	Sample
2-10 ml whole blood	45.00	Sample
Tissue	POR	
High throughput DNA extraction	POR	

**RNA Extraction, Trizol method:** Recommended for solid tissue and cell culture

≤15 mg solid tissue	35.00	Sample
> 15 mg solid tissue, based on tissue size and customer requirements	POR	
≤10 <sup>7</sup> cells, Cell culture	25.00	Sample

**RNA Extractions from whole Blood:** May require additional concentration

Tempus Tube (Applied Biosystems), 3 ml whole blood	35.00	Sample
Paxgene Tube (Qiagen), 2.5 ml whole blood	40.00	Sample

### Supplementary RNA/DNA Services

Microcon concentration, RNA or DNA	15.00	Sample
RNeasy®, secondary purification of RNA (≤ 100µg RNA)	20.00	Sample
RNeasy® with DNAase I treatment, secondary purification of RNA (≤ 100µg RNA)	25.00	Sample
RiboGreen Quantitation of RNA, 1-24 Samples	8.00	Sample

RiboGreen Quantitation of RNA, >24 Samples	POR	
PicoGreen Quantitation of DNA, 1-24 samples	8.00	Sample
PicoGreen Quantitation of DNA, >24 samples, price based on volume	POR	
Whole Genome Amplification, Qiagen MDA, 45 µg yield, 1-24 samples	40.00	Sample
Whole Genome Amplification, Qiagen MDA, 45 µg yield 25-96 samples	35.00	Sample
RNA QC Bioanalyzer chip (Agilent), 12 samples	75.00	Chip

### Services available at an hourly rate

Project Management services	50.00	Hour
Dilution or aliquots of sample sets	50.00	Hour
Quantitation of RNA/DNA by Spectrophotometry	50.00	Hour

### Sample Banking

-80°C monitored storage (5¼ X 2" box)	45.00	Box/Year
Liquid nitrogen monitored storage (Box of 81 or 100 vials)	100.00	Box/Year

## Clone Services

Robotic high throughput Colony Picking from agarose plates	POR	
RPCI 11 BAC clone library segments 1 & 2	POR	
I.M.A.G.E. Consortium (LLNL) cDNA clones, 40K set	POR	
<i>Colonies are picked from agar dishes to 96 well plates. Contact the Core Facility for instructions on plate type and agar depth requirements.</i>		

### Colony Picking, PCR and sequencing for SAGE

12 plates: Colony picking, PCR, PCR cleanup & sequencing	8.00	Clone
PCR of SAGE library clones (M13 primer set)	72.00	96 well plate
PCR cleanup and sequencing	672.00	96 well plate
Sequencing	528.00	96 well plate

*All sequencing is unidirectional with one template and primer. Further discounts are available with increased volume.*

Please contact the core laboratories for large volume and project discounts on all services.

POR = Price on Request