

# AgriGenomics Laboratory Services

Last Update: Nov. 21, 2013

Prices (US\$) subject to change. Shipping, insurance, taxes and handling charges may apply.

## PLANT DNA & RNA EXTRACTION SERVICES

Customer type				
TAMUS	Unit (pricing)	Yield (typical)	Minimum order (at this rate)	Method

### Manual DNA Extraction by AGL (supplies and technical labor)

\$12.19	Sample	varies	24	CTAB-(DNA), typically ~100ul @ 100+ ng/ul, \$20/supplies only; ~16 hrs. technical time
\$6.65	Sample	1–30 µg	24	DNeasy (Qiagen, manual, tube-based)-(DNA) ~\$4 each (~\$950/250); ~8 hr. technical time
\$4.99	Sample	1–30 µg	24	NucleoSpin Plant II (Macherey-Nagel, manual, tube-based)-(DNA) \$650/250 ~\$1.50; ~8 hr. technical time

### Manual DNA Extraction by User (supplies only)

\$0.43	Sample	varies	1	CTAB-(DNA), typically ~100ul @ 100+ ng/ul, \$20/supplies only; ~16 hrs. technical time
\$5.49	Sample	1–30 µg	1	DNeasy (Qiagen, manual, tube-based)-(DNA) ~\$4 each (~\$950/250); ~8 hr. technical time
\$3.82	Sample	1–30 µg	1	NucleoSpin Plant II (Macherey-Nagel, manual, tube-based)-(DNA) ~\$150; ~8 hr. technical time

### Robotic DNA Extraction

Supplies and labor included

\$7.98	Sample	1–15 µg	96	DNeasy 96 Plant Kit (6), for robot-based extraction, (Qiagen, plate-based)-(DNA) ~\$3 each; ~8 hr. technical time
\$6.32	Sample	1–15 µg	96	NucleoSpin® 96 Plant II (2, 4, 24- plate orders, ~\$250 each 96 plate)

### Seed-based DNA Extraction by AGL

For MAS for many PCR-based markers, e.g. SNPs or SSRs (prices approximate; species dependent; non-destructive option also species-dependent)

Supplies and labor included

\$1.33	Sample	~ 1 ug (species dependent)	species dependent	Destructive seed-based; species dependent
\$1.40	Sample	~ 1 ug (species dependent)	species dependent	Non-destructive, with seed archived with maintenance of corresponding DNA and seed identities

### Seed-based DNA Extraction by User for MAS with few PCR-based markers, e.g. SNPs or SSRs (prices approximate; species dependent; non-destructive option also)

Supplies (labor provided by user)

\$0.20	Sample	~ 1 ug (species dependent)	0	Destructive seed-based (species dependent)
\$0.27	Sample	~ 1 ug (species dependent)	0	Non-destructive, with seed archived with maintenance of corresponding DNA and seed identities

### RNA Extraction (Minimum purchase must include smallest kit available)

Supplies and labor included

\$29.93	Sample	up to 100 ug RNA	4 (but must buy kit)	RNA Spectrum (Sigma)-(RNA) & post DNase I tmt, 10- or 70-sample kits: ~\$5-10/sample
\$29.93	Sample	25-60 ug / 30-100 ul	4 (but must buy kit)	RNeasy (Qiagen)-(RNA) 20- or 50-sample kits: ~\$150 or \$350

## GENOTYPING SERVICES (plants or seed) - including PCR (PCR at AGL)

**SSR (PCR with non-labeled primers, capillary-based 2-5bp resolution)**

User completes PCR; AGL determines amplicon sizes

\$1.33	Sample	N/a	12	eGene (Qiixel) 12-capillary fragment analyzer: \$1 each, 12-lane minimum
\$1.33	Sample	N/a	96	AATI 96-capillary DNA Fragment Analyzer \$1 each, 96-well plate (minimum)

**SSRs - capillary-based amplicon size analysis 2-5bp resolution**

Supplies and labor included

\$2.00	Sample	N/a	12	Size separation by 12-capillary eGene (Qiixel) fragment analyzer: \$1 each, 12-lane minimum
\$2.00	Sample	N/a	96	Size separation by 96-capillary AATI DNA Fragment Analyzer \$70/96-well plate (minimum)

**SNP - KASPar assays, based on PCR with non-labeled primers**

KASP assay design, ordering and trial: primer costs + tech. time + supplies

Supplies and labor included

\$0.67	Sample	N/a	1 + plate cost	KASP 96-plate: FrameStar® 96-well skirted PCR plate, white wells, black frame
\$0.35	Sample	N/a	96	KASP 384-plate: FrameStar® 384-well skirted PCR plate, white wells, black frame

**PCR & MISCELLANEOUS****Consultation in KASPar assay development, primer design and ordering**

\$33.25	hour	N/a	0.50	Varies
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**Use of Thermocyclers and Hydrocycler**

Plates and contents provided by user

\$0.67	PCR Run	N/a	1	96-well
\$2.00	PCR Run	N/a	1	384-well
\$6.65	PCR Run	N/a	1	Hydrocycler (per run: up to 8 96-well or 16 384-well plates)

**Plates**

Hydrocycler (settings for sealer) and Pherastar plate reader (optical settings) require FrameStar plates

**PCR (plates and contents provided by AGL, except DNA sample and primer)**

Hydrocycler (settings for sealer) and Pherastar plate reader (optical settings) require FrameStar plates

\$3.99	Plate	N/a	1	FrameStar® 96-well skirted PCR plate, white wells, black frame
\$3.99	Plate	N/a	1	FrameStar® 384-well skirted PCR plate, white wells, black frame

**Mastermixes**

Mastermix

Inquire	sample	N/a	Inquire	Conventional (ABI AmpliTaq Gold or ~equivalent)
\$2.00	96-well plate	N/a	1	LGC KASPar Assay MasterMix per well at 96-well plate
\$2.00	384-well plate	N/a	1	LGC KASPar Assay MasterMix per well at 384-well plate