# **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**

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Comm	nercial	Unit (pricing)	Yield (typical)	Minimum order (at this rate)	Method

Manual DNA Extraction by AGL (supplies and technical labor)

\$18.33	Sample	varies	24	CTAB-(DNA), typically ~100ul @ 100+ ng/ul, \$20/supplies only; ~16 hrs. technical time
\$10.00	Sample	1–30 μg	24	DNeasy (Qiagen, manual, tube-based)-(DNA) ~\$4 each (~\$950/250); ~8 hr. technical time
\$7.50	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)

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n/a	Sample	varies	1	CTAB-(DNA), typically ~100ul @ 100+ ng/ul, \$20/supplies only; ~16 hrs. technical time
n/a	Sample	1–30 μg	1	DNeasy (Qiagen, manual, tube-based)-(DNA) ~\$4 each (~\$950/250); ~8 hr. technical time
n/a	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

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	\$12.00	Sample	1–15 μg	96	DNeasy 96 Plant Kit (6), for robot-based extraction, (Qiagen, plate-based)-(DNA) ~\$3 each; ~8 hr. technical time	
	\$9.50	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

Ç	\$2.00	Sample	~ 1 ug (species dependent)	species dependent	Destructive seed-based; species dependent
Ş	\$2.10	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 of the policy of the process of the proces

Supplies (labor provided by user)

n/a	Sample	~ 1 ug (species dependent)	0	Destructive seed-based (species dependent)
n/a	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

\$45.00 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
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Γ	ć 45.00	6 1	25.60 /20.400 /	4	DN (0: \(\O\)\(\O\)
	\$45.00	Sample	25-60 ug / 30-100 ul	(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

	\$2.00	Sample	Sample N/a		eGene (Qiaxel) 12-capillary fragment analzyer: \$1 each, 12-lane minimum
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	\$2.00	Sample	N/a	96	AATI 96-capillary DNA Fragment Analyzer \$1 each, 96-well plate
	J2.00	Sample	IN/ a	50	(minimum)

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

Supplies and labor included

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	\$3.00	Sample	N/a	12	Size separation by 12-capillary eGene (Qiaxel) fragment analzyer: \$1 each. 12-lane minimum
					cach, 12 lane miniman
	\$3.00	Sample	N/a	96	Size separation by 96-capillary AATI DNA Fragment Analyzer \$70/96-
	\$5.00				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

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\$1.00	Sample	N/a	1 + plate cost	KASP 96-plate: FrameStar® 96-well skirted PCR plate, white wells, black	
\$1.00				frame	
\$0.52	Sample	N/a	96	KASP 384-plate: FrameStar® 384-well skirted PCR plate, white wells,	
30.32	Sample	IN/ d	90	black frame	

## **PCR & MISCELLANEOUS**

## Consultation in KASPar assay development, primer design and ordering

\$50.00	hour	N/a	0.50	Varies	

## **Use of Thermocyclers and Hydrocycler**

Plates and contents provided by user

\$1.00	PCR Run	N/a	1	96-well
\$3.00	PCR Run	N/a	1	384-well
\$10.00	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

\$6.00	Plate	N/a	1	FrameStar® 96-well skirted PCR plate, white wells, black frame
\$6.00	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)
\$3.00	96-well plate	N/a	1	LGC KASPar Assay MasterMix per well at 96-well plate
\$3.00	384-well plate	N/a	1	LGC KASPar Assay MasterMix per well at 384-well plate