

LAMP Materials and Costs

Item	Product Number and Link	Product Details	Unit	Cost, Blue=one time upfront cost	Notes
Heater and Mini Block					
VWR Advanced Mini Block Heater	10153-318	120V, 50/60 Hz, 80 W	1	\$550.34	Block Heater
VWR Mini Block for 40 x 0.2 mL tubes	10153-360	Block suitable for 200 ul PCR tubes	1	\$101.25	Mini Block for holding PCR tubes
Pipette Tips					
ThermoFisher Pipette Tips for 0.5 to 2 (or 10 ul) volumes	2140PK	ART 10 REACH, Filtered, Sterile, Lift-off Lid Rack	Pack of 960	\$203.97	"smallest" pipette tip size needed for assay
VWR Pipet tips for 10 to 20 ul volumes	76322-134	VWR PIPET TIP UNIV FLTR ST 20UL	Pack of 960	\$168.31	"small" pipette tip
VWR Pipette tips for 200 ul volumes	76322-150	VWR PIPET TIP FLTR ST 200UL	Pack of 960	\$170.91	"mid-size" pipette tip
Tubes					
Laboratory Product Sales Inc., 1.5 ml centrifuge tubes, capped, polypropylene	L211511	1.7mL MCT, Safesecal, Grad, Nat, PP,	Pack of 500	\$13.41	
Eppendorf 5 ml centrifuge tubes	0030119401	Eppendorf Tubes® 5.0 mL with snap cap, 5.0 mL, Eppendorf Quality™, colorless, polypropylene	200 tubes (2 bags x 100 tubes)	\$73.00	
Laboratory Product Sales Inc., 200 ul, thin-walled PCR tubes in strips of 8	L232401	0.2mL 8-Snap Strip, CLEAR, w/attached dome caps, 960/UN	960	\$82.46	
Pipettors					
P-10 Pipettor with capacity to transfer 0.1 to 2 ul volumes	76627-772		1	\$138.15	
P-20 Pipettor with capacity to transfer 2 to 20 ul volumes	76627-776		1	\$131.49	
P-200 Pipettor with capacity to transfer 20 to 200 ul volumes	76627-798		1	\$131.49	
Reagents					
WarmStart Colorimetric LAMP 2X Master Mix (DNA&RNA)	M1800S	100 reactions	1250 ul	\$243	
WarmStart Colorimetric LAMP 2X Master Mix (DNA&RNA)- Larger size	M1800L	500 reactions	6250 ul	\$970	A larger unit of the above reagent
Primers					
Primers	www.idtdna.com/pages	Primers will provide a "lifetime supply"		\$300	See the UCCE resource "Ordering LAMP Primers"
AL&L Crop Solutions costs to prepare primer solutions	www.allcropsolutions.com	UCCE-Napa has been cooperating with AL&L. However, any laboratory can be used for these services	96 primer aliquots	\$48 at AL&L	
RB DNA Controls					
AL&L Crop Solutions	www.allcropsolutions.com	Any laboratory that analyzes Red Blotch samples can be used for these services. The purified DNA can be diluted and used all season.	200 ul	\$10.00	AL&L includes this cost in purchasing primers (make sure to request the controls), if they are ordered separately from primers they are \$10
Other helpful lab equipment					
Eppendorf tube holders	Simport Scientific T450-25R 25-Place Rack	Scientific T450-25R 25-Place Rack for 5.0ml Microcentrifuge Tube, Red		\$39.06	
PCR tube holders	PCR Tube Rack for 0.2ml Micro-Tubes	PCR Tube Rack for 0.2ml Micro-Tubes, 8 x 12 Array Pack of 5		\$15.60	
Centrifuge tube holders	Tube Rack Double Panel 60 Positions	Tube Rack Double Panel 60 Positions Polypropylene for 0.5ml-2ml Microcentrifuge Tubes, Pack of 5		\$19.96	

Costs Per Sample

Costs per sample can range depending on the quantity of controls and samples included in each run. Below are the estimate ranges for using 1 control for every 3.5 vines (the recommended use) and using no controls. These costs do not include one time purchased materials as well as labor costs for collection and processing.

	No controls	1 control per 3.5 vine samples
Cost per Vine	\$2.33	\$2.83

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