

Materials List for:

qPCRTag Analysis - A High Throughput, Real Time PCR Assay for Sc2.0 Genotyping

Leslie A. Mitchell¹, Nick A. Phillips¹, Andrea Lafont², James A. Martin¹, Rupal Cutting², Jef D. Boeke¹

¹Department of Biochemistry and Molecular Pharmacology, Institute for Systems Genetics

²Roche Life Science, USA

Correspondence to: Jef D. Boeke at jef.boeke@nyumc.org

URL: <https://www.jove.com/video/52941>

DOI: [doi:10.3791/52941](https://doi.org/10.3791/52941)

Materials

Name	Company	Catalog Number	Comments
Yeast gDNA prep			
yeast gDNA	custom	custom	template for real time PCR
Acid-washed glass beads (0.5 mm)	Sigma	G8772	yeast cell lysis
Ultrapure Phenol:Chloroform:Isoamyl Alcohol (25:24:1, v/v)	Invitrogen	15593-031	yeast cell lysis
5432 Mixer	Eppendorf	5432	yeast cell lysis
Microcentrifuge 5417R	Eppendorf	22621807	yeast cell lysis
Qubit 3.0 Fluorometer	Life Technologies	Q33216	gDNA quantification
Qubit dsDNA BR Assay Kit	Life Technologies	Q32850	gDNA quantification
Labcyte 384PP plate	Labcyte	P-05525	gDNA source plate
DNA Green Mastermix prep and dispensing			
LightCycler 1536 DNA Green	Roche	5573092001	real time PCR mastermix
1.5 ml Microfuge Tube Holder	ARI	EST BD060314-1	microfuge tube holder for deck of Cobra
LightCycler 1536 Multiwell Plate	Roche	5358639001	
Cobra liquid handling system	Art Robbins Instruments	630-1000-10	dispense qPCR master mix into 1536 plate
PCR Plate Spinner	VWR	89184-608	centrifugation of 1536 plate
Template and primer dispensing			
PCRTag primers	IDT	custom	premixed forward and reverse, 50 μM each
TempPlate pierceable sealing foil, sterile	USA Scientific	2923-0110	temporary seal for PCRTag primer plates
Labcyte LDV 384 well plate	Labcyte	LP-0200	pre-mixed primer source plate
Echo 550 Liquid Handler	Labcyte		transfer 2.5 nl drops of primer and template DNA into 1536 plate
Plateloc Thermal Microplate Sealer	Agilent	G5402-90001	heat seal for 1536 plate prior to LC1536 run
Clear Permanent Seal	Agilent	24212-001	optically clear heat seal for LC1536 multiwell plate
PlateLoc Roche/LightCycler 1536 Plate Stage	Agilent	G5402-20008	can substitute ~2 mm thick washers
Sorvall Legend XTR	Thermo Scientific	75-004-521	centrifuge heat sealed 1536 plate
Industrial Air Compressor	Jun Air	1795011	to run the Echo and Heat Sealer
Real Time PCR			

LightCycler 1536	Roche		requires 220 V outlet
------------------	-------	--	-----------------------