## Rps10 Locus-specific Illumina Amplicon PCR Protocol

## Updated October 2018

The propose of the rps10 locus-specific protocol is to amplify the oomycete rps10 locus for metagenomic research. This produces an amplicon around about 441bp. We have tested this protocol with DNA from the DNeasy PowerSoil Kit from Qiagen (Cat No. 12888) and the DNeasy Plant mini kit from Qiagen (Cat No. 69106), but other sources of DNA will probably works as well.

## Rps10 locus-specific PCR mixture

Reagent	Volume	Final conc.
dH2O, Sterile	$7.0 \mu L$	NA
2x Qiagen Type-IT PCR Mix	$17.5 \mu L$	1x
Rps10 Primer Mix	$3.5 \mu L$	$0.2 \text{-} 0.4 \; \mu \text{M}$
DNA Template (2ng)	$7.0 \mu L$	$0.4 \mathrm{ng}/\mathrm{\mu L}$
TOTAL	$35.0 \mu L$	NA

<sup>&</sup>lt;sup>1</sup> Type-it Microsatellite PCR Kit from Qiagen (Cat No. 206243)

## Rps10 locus-specific thermocycler conditions

Step	Temperature	Time
Initial activation	95 °C	5 min
3 Step cycling (35 cycles)		
Denaturation	$95~^{\circ}\mathrm{C}$	$30 \mathrm{s}$
Annealing	58 °C	$3 \min$
Extension	$72~^{\circ}\mathrm{C}$	$30 \mathrm{s}$
Final Extension	$60~^{\circ}\mathrm{C}$	$30 \min$
Hold	10 °C	$\infty$

<sup>&</sup>lt;sup>2</sup> Total volume based on 30μL of amplicon, 4μL to run on a gel, 1ul to account for error