## 22/04/2016

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	<b>Additive: DMSO</b>	0	%			
35 uL	1X_65ul 1.5ul Mg+	1ul	Х	Master Mix (no primers)	2 x	
Amount	Compound		Amount	Compound		
24.85 uL	$ddH_2O$	0.71	49.7 uL	$ddH_2O$	49.7	
0 <sub>uL</sub>	DMSO 100%	0	0 <sub>uL</sub>	DMSO 100%	0	
3.5 <sub>uL</sub>	10x PCR buffer	0.1	7 <sub>uL</sub>	10x PCR buffer	7	
2.8 uL	dNTPs (2.5mM each)	0.08	5.6 uL	dNTPs (2.5mM each)	5.6	
2.1 uL	MgCl2	0.06	4.2 uL	MgCl2	4.2	
0.35 <sub>uL</sub>	Pf, 5μM	0.01	0.7 <sub>uL</sub>	Pf, 5μM	66.5	
0.35 <sub>uL</sub>	Pr, 5 μM	0.01	0.7 <sub>uL</sub>	Pr, 5 μM		
0.7 <sub>uL</sub>	DNA template	0.02	1.4 <sub>uL</sub>	DNA template		
0.35 uL	Polymerase	0.01	0.7 <sub>uL</sub>	Polymerase		
35 uL	Total	1	<b>70</b> uL	Total  mm per25 ul:	33.25	35

Here are a recipe for master mix and cycling conditions for 18S:

<u>I</u>	, <u>e</u>						
Reaction mixture with Pfu polymerase per 30ul reaction:							
water 22.23ul Primer: 100 nm: use twice less: 0.6 uL							
buffer 3ul	1a light colony pcr from phototrophs 16s						
dNTPs 0.2ul of a 25uM solution	1b light colony pcr from phototrophs 18s						
forward primer 1.56ul of a 10uM solution	2a dark colony pcr from phototrophs 16s						
reverse primer 1.56ul of a 10uM solution	2b dark colony pcr from phototrophs 16s						
Pfu polymerase 0.25ul	3a crp2-2 plate 16s						
template DNA 1ul	3b crp2-2 plate 18s						
	4a bl2 16s						
PCR conditions:	4b bl2 18s						

## !!!Primers are 100 uM, therefore used twice less!!!

For template 1:50 duluted DNA from genomic extractions was used 95C for 5 minutes,10 cycles of touchdown PCR: 95C for 30s, 60C for 30s (decreasing at 0.5C/cycle), and 72C for 30s, followed by 30 cycles: 95C for 30s, 55C for 30s, and 72C for for 5 minutes. 30s, and 72C for 5 minutes.

	Cheers,	0	%			
40 uL	Angela.	1ul	Х		Master Mix (no primers)	0 x
Amount	Compound		Amou	ınt	Compound	
27.6 uL	$ddH_2O$	0.69	0	uL	$ddH_2O$	0
0uL	DMSO 100%	0	0	uL	DMSO 100%	0
4 uL	10x PCR buffer	0.1	0	uL	10x PCR buffer	0
3.2 <sub>uL</sub>	dNTPs (2.5mM each)	0.08	0	uL	dNTPs (2.5mM each)	0
2.4 uL	MgC12	0.06	0	uL	MgCl2	0
0.8 uL	Pf, 5μM	0.02	0	uL	Pf, 5μM	0
0.8 uL	Pr, 5 μM	0.02	0	uL	Pr, 5 μM	
0.8 uL	DNA template	0.02	0	uL	DNA template	
0.4 uL	Polymerase	0.01	0	uL	Polymerase	