Jeffrey Chuong 4/16 - 4/17

SATURDAY, 4/16/2022

Rehydrated primers to create a 10x stock solution

Annealing Temperatures: (NEB Tm calculator, 250 nM primer concentration, Phusion)

- pbpG (Jeffrey):
 - Upstream: 65 C
 - Downstream: 64 C
- recJ (Vivek):
 - Upstream: 61 C
 - Downstream: 61 C

Set up PCR reactions and a negative control for each downstream and upstream flanks

Inoculated 2 of each -80C stock from last week in 5 mL LB and 5 uL Kan Inoculated a negative control

SUNDAY, 4/17/2022

Created gels to visualize PCR products

<u>Whole Cell PCR to confirm tdk/kan casette insertion</u> (https://barricklab.org/twiki/bin/view/Lab/ProtocolsStandardPCR) Make 1000-fold dilutions of overnight culture, 1 ul in 1 mL ddH2O in an Eppendorf tube Combine 5 ul of the 1000-fold dilution with mastermix for 50 ul PCR reaction Set up 135 ul mastermix on ice with ACIAD2049 Upstream Forward and Downstream Reverse primers

Gel 3 wells

Ladder Jeffrey Upstream Upstream Upstream Negative Control Downstream Downstream

<u>Vivek</u>

Downstream Downstream Downstream Negative Control Upstream Upstream Upstream Negative Control

Most gels didn't show very strong bands, need to troubleshoot PCR Is gel imager working properly? Imaged gel after 20 minutes, Imaged gel after 30 minutes

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