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Priority

General

[2] PCR purify
[2] OD

Caroline Jr. and Hamza will be presenting on Monday, when Ron and Cil are here.

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Plasmids
 pLV-TRE-Ngn1-EYFP-2A-mKate-Ubc-Bla
      [1] Redo PCR for Ngn1 [Eric picked it up.]
      [1] Run gel of PCR products
                [1] Cut gel in half.
      [1] Gradient PCR with betaine for Ngn1 = Did Not Work
      [1] Digest pLV-TRE-Ngn1-IRES2-EGFP w/ EcoRI and BamHI
      [1] Gel Extract – Done in 10-20min
      [1] Set up Ngn1-EYFP-mKate PCR – Need Ngn1
      [1] Set up Ngn1-EYFP PCR (in case the Ngn1-EYFP-mKate construct does not work)
      [1] Extract PCR products from gel
                -- cut out gel for EYFP (12.6 ng/ul) and mKate (31.4 ng/ul)
      [1] PCR together EYFP and mKate
      [1] O.D. (72.7 ng/ul)
pLV-TRE-Sox17-Ubc-Bla
                [2] Pick colonies of pLV-TRE-Sox17-Ubc-Bla (tried 3 plates – 2 worked. 10 total, 5 from each of two plates)
                [2] Grow 10 minipreps - Prepare growth cultures; 12
                [2] Miniprep 10 cultures of pLV-TRE-Sox17-Ubc-Bla (5 surviving, 100 – 300 ng/ul)
                [2] Restriction map pLV-TRE-Sox17-Ubc-Bla with PacI, NheI/BsiWI
                [2] Run on gel
                [2] Gel Picture [Add to lab notebook!] – PacI may have cut correctly, NheI/BsiWI failed.
                [2] Redo NheI/BsiWI digest
                [2] Image. (Didn't work)
                [2] Transform colonies. Plate. Incubate overnight at 37. Transfer to +4 Saturday 10am-2pm [Hamza].
                [2] Depending on restriction map, choose one colony to grow at 37 for MaxiPrep. [Caroline Jr. on Sunday]
                [3] pLV-TRE-Sox17-Ubc-Bla Colony 6 – set up growth culture at 37 for maxiprep.[Caroline Jr., Sunday, 6-7 PM]
                [3] Midiprep 2 cultures of pLV-TRE-Sox17-Ubc-Bla (Use 50mL of culture; Spin down and freeze the rest.) – (6) – 792ng/uL; (2-1) – 381ng/uL
                [3] Restriction Map w/ xxx and yyy
                [3] Prepare 12 more colonies from Sox17 plates for overnight growth in miniprep.- Pick up tomorrow morning
                [Cil] Buy reasonable maxi- and mini-prep kits.- Failure.
 pLV-Ubc-rtTA-2A-Bla
      [2] Digest pFUGW with EcoRI and AgeI
   [2] Run pFUGW-EcorI-AgeI digest on gel.
   [2] Gel Extraction
      [2] CIP pFUGW-AgeI-EcoRI
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[2] Ligate pFUGW-AgeI-EcoRI-CIP and rtTA-2A-Bla-BspEI-EcoRI

[3] Transform p148. Grow overnight on plates (Evan). Got ~500 colonies.

[3] Setup for maxiprep – grow overnight in 400ml LB Amp.

[3] Maxiprep

[3] O.D. [~500 ng/uL]

[3] Trust in God that the sequence is correct (Pray?) (Donations?)

- [3] Transformed
- [3] Pick colony
- [3] Grow colony for maxiprep. Take out into +4C Wed. @ 8:30am (Navin)
- [3] Maxiprep [1330-1360 ng/ul] (Two O.D. tries)
- [3] Trust in God that the sequence is correct (Pray?) (Donations?)

Lentivirus

Lenti: pLV-TRE-Ngn1-EYFP-2A-mKate-Ubc-Bla

Experiments

Experiment: Ngn1-EYFP-2A-mKate

Infect cells

Add Dox

Observe differentiation

Make Yellow/Red artificial brains