

PCR

- Amplification of 110 matrix with :
 - 1 and 10 primers
 - 11 and 12 primers
 - 13 and 3 primers
 - 20 and 6 primers
 - + Control

Hybridation temperature used : 69°C

Elongation time used : 1 min 30 sec

- Gel verification of amplifications
 - Agarose gel : 1%
 - 100 mV, 30 min

=> Successful amplification of all pcr products

PCR

- Amplification of 113 matrix with :
 - 7 and 14 primers
 - 15 and 16 primers
 - 17 and 8 primers
 - + Control

Hybridation temperature used : 69°C

Elongation time used : 20 sec

- Gel verification of amplifications
 - Agarose gel : 1%
 - 100 mV, 30 min

=> Successful amplification of :

7 + 14

8 + 17

PCR

- Amplification of Dnmt matrix with :
 - 23 and 9 primers
 - 21 and 4 primers
 - 5 and 2 primers
 - 22 and 4 primers
 - + Control

Hybridation temperature used : 68°C

Elongation time used : 50 sec

- Gel verification of amplifications
 - Agarose gel : 1%
 - 100 mV, 30 min

=> Successful amplification of all pcr products

GIBSON ASSEMBLY (dCas9)

psB1C3 : 0,5 µL

1 + 10 : 1 µL

11 + 12 : 1µL

13 + 3 : 1µL

Mix : 10µL

H₂O : 6,5µL

(Control done with circular plasmid)

- Put on the thermocycler at 50°C during 60 min
- Put at -20°C until the transformation step

TRANSFORMATION

- Transformation in DH5 α of :
psB1C3 containing 3 fragments of 110 matrix (LB + Choramphenicol)
- Put plates at 37°C

PCR

- Amplification of 2 matrix with:
 - 15 and 16 primers (113 matrix)
 - 18 and 19 primers (gDNA matrix)
- + Control

Hybridation temperature used : 69°C

Elongation time used : 15sec

- Gel verification of amplifications
 - Agarose gel : 1%
 - 100 mV, 30 min

=> No amplification observed

- No colony on the plate containing the cloning of 110 matrix (08-15-16)

CLONING

- Digest of
 - psB1C3 with EcoRI and PstI
 - 10X GCN4 with EcoRI and PstI
 - Dnmt3a with EcoRI and PstI
- Put on the incubator at 37°C during 1h
- Dephosphorylation of psB1C3
 - Put on the incubator at 37°C during 1h
- Phosphatase inactivation
 - At 80°C during 10 min
- Ligation
 - 10X GCN4 in psB1C3
 - Dnmt3a in psB1C3
 - Put 1h at room temperature

TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing 10X GCN4 (LB + Chloramphenicol)
 - psB1C3 containing Dnmt3a
- Put on the incubator at 37°C

PCR

- Amplification of 2 matrix with:
 - 15 and 16 primers (113 matrix)
 - 18 and 19 primers (gDNA matrix)
 - + Control

Hybridation temperature used : 74°C

Elongation time used : 15sec

- Gel verification of amplifications
 - Agarose gel : 1%
 - 100 mV, 30 min

=> No amplification observed

GIBSON ASSEMBLY

psB1C3 with :

- 1 + 10 fragment
- 11 + 12 fragment
- 13 + 3 fragment
- Control

- Put on the thermocycler at 50°C during 60 min

TRANSFORMATION

- Transformation in DH5 α of :
 - psB1C3 containing 3 fragments of 110 matrix (LB + Choramphenicol)
- Put plates at 37°C

NEW TRY OF TRANSFORMATION

- Transformation in DH5 α of:
 - psB1C3 containing 10X GCN4 (LB + Choramphenicol)
 - psB1C3 containing Dnmt3a
- Put on the incubator at 37°C
- No colony on plates containing 10X GCN4 cloning and Dnmt3a cloning (08-17-16)

- No colony on the plate containing the cloning of 110 matrix (08-18-16)

SET UP MINICULTURES

- Pick selected colony of agar plates and put it on 6mL of LB + Chloramphenicol
 - psB1C3 containing 10X GNC4 (X2)
 - psB1C3 containing Dnmat3a (X2)
- Put on the shaking incubator at 37°C

GIBSON ASSEMBLY (Dnmt3a3l)

psB1C3 with:

- 21 + 4 fragment
- 5 + 2 fragment
- Control

- Put on the thermocycler at 50°C during 60 min

GIBSON ASSEMBLY (Dnmt3l)

psB1C3 with:

- 22 + 4 fragment
- 5 + 2 fragment
- Control

- Put on the thermocycler at 50°C during 60 min

TRANSFORMATION

- Transformation in DH5α of :
 - psB1C3 containing Dnmt3a3l (LB + Choramphenicol)
 - psB1C3 containing Dnmt3l
- Put plates at 37°C

MINIPREP

- Miniprep of:
 - psB1C3 10X GCN4 1
 - psB1C3 10X GCN4 2
 - psB1C3 Dnmt3a 1
 - psB1C3 Dnmt3a 2

GEL MIGRATION

- Gel verification of miniprep tubes
 - Fisrt, the plasmid is digested 1h at 37°C
 - Agarose gel: 1%
 - 100 mV, 30 min

=> Nothing

08-24-16

- No colony on the plate containing the cloning of Dnmt3a3l (08-22-16)
- No colony on the plate containing the cloning of Dnmt3l (08-22-16)