

## August

### August 1st

**Experiment:** PCR

**Responsables:** Pablo Delgado

**Protocol code:** PCR

**Protocol modifications or specifications:** All minipreps from July 30th and July 31st of the IDT gblocks was used as template for a PCR to confirmed its presence. Prefix and Suffix iGEM primers was used, with an annealing temperature of 56°C and a extension of 2:45 min.

**Results:**

No amplification was observed, just the plasmid.

### August 1<sup>st</sup>

**Experiment:** Transformation

**Responsables:** Pablo Delgado

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** None

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff + bbA RFP	A	X	X
P3_ARNas_GFP + bbA RFP	A	X	X
P3_ARNas_Lisina + bbA RFP	A	X	X
MCS_Lacto + pSB1A3 linearized plasmid*	A	X	X
C+ (bbA RFP)	A	X	X
C-	A	X	X

\*Should be red

### August 2nd

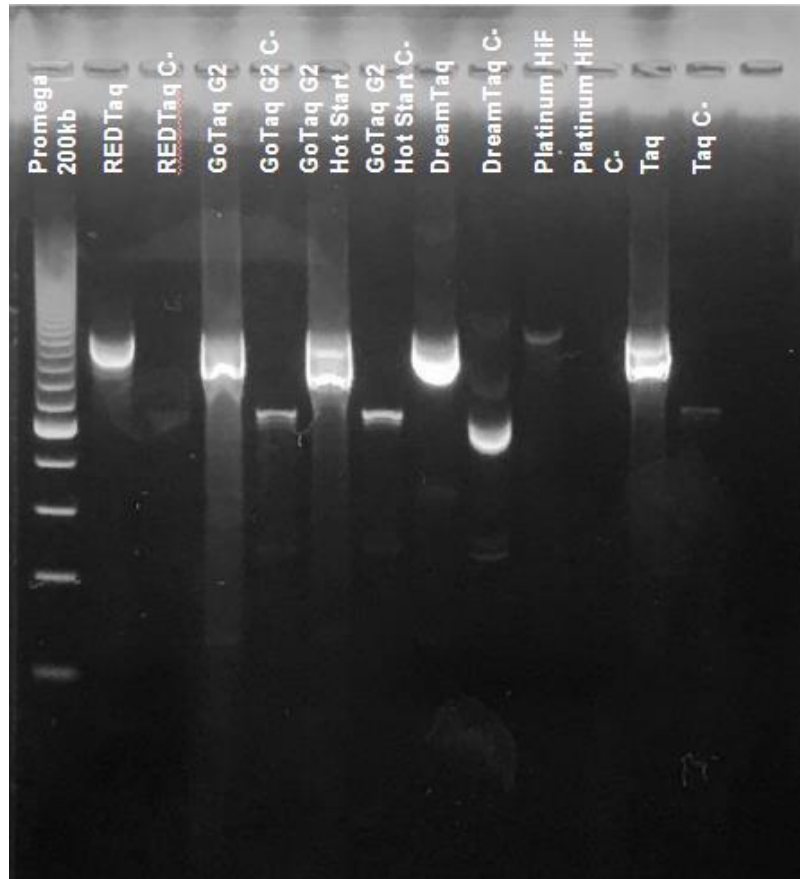
**Experiment:** PCR

**Responsables:** Paula Thiel

**Protocol code:** PCR

**Protocol modifications or specifications:** Different polymerases were tested by the amplification of miniprep K358006 (June, 20th). Polymerases tested are the followings: REDTaq® Sigma, Go TaqG2® Promega, Go TaqG2 Hot Start® Promega, DreamTaq® Thermo Fisher Scientific, Platinum HiF® Invitrogen, Taq Promega. All reactions were prepared as described by the manufacturer. Amplicons were run in a 1.5% agarose gel at 80V for 2 hours.

**Results:**



## August 5th

**Experiment:** PCR

**Responsables:** Paula Thiel and Pablo Delgado

**Protocol code:** PCR

**Protocol modifications or specifications:** Samples amplified are the followings: IDT devices, minipreps from July 27th, July 30th and July 31th, K358006 and RFP. The reaction was prepared using REDTaq polymerase. Products were run in 1.5% agarose gel for 2 hours.

**Results:** No expected bands were obtained.

## August 5th

**Experiment:** Transformation

**Responsables:** María José

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** None

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff + bbA RFP	A	X	X
P3_ARNas_GFP + bbA RFP	A	X	X

P3_ARNas_Lisina + bbA RFP	A	X	X
MCS_Lacto + pSB1A3 linearized plasmid*	A	X	X
C+ (bbA RFP)	A	X	X
C-	A	X	X

\*Should be red

## August 6th

**Experiment:** Transformation

**Responsables:** María José and Paula Thiel

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** None

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff + bbA RFP	A	✓	X
P3_ARNas_GFP + bbA RFP	A	✓	X
P3_ARNas_Lisina + bbA RFP	A	✓	X
MCS_Lacto + pSB1A3 linearized plasmid*	A	X	X
C+ (bbA RFP)	A	✓	X
C-	A	X	X

\*Should be red

## August 6th

**Experiment:** Restriction

**Responsables:** Pablo Delgado

**Protocol code:** Rest

**Protocol modifications or specifications:** gBlock assembly was verified. 1000ng of plasmid were used in 25uL of reaction. bbT-RFP vector plasmido was the digested on June 22th

Part	Enzymes	Result
Lin_Sin2	E+S	
P3_GFP_Caract	X+P	
P3_TetR	X+P	
ILC1	E+P	

## August 6th

**Experiment:** Ligation

**Responsables:** Pablo Delgado

**Protocol code:** Lig

**Protocol modifications or specifications:** Enzyme T4 used was a new one bought from NEB. 0.2µL of ligase (2.000.000 U/ml) was used. Incubation took 16 hours at 16°C. Ligation was made as shown in the next table:

Upstream part	Insert part Volume (µL)	Downstream part	Insert part Volume (µL)	Backbone	Backbone Volume (µL)
Lin_Sin2	8.5	P3_GFP_Caract	8.5	bbT RFP	0,5
Lin_Sin2	8.5	P3_TetR	8.5	bbT RFP	0,5
MCS_Lacto	~9			ILC1	0,5

**Results:** No result needed.

## August 7th

**Experiment:** Transformation

**Responsables:** Pablo Delgado

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** None

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_Sin2 + P3_GFP_Caract	T	✓	X
Lin_Sin2 + P3_TetR	T	✓	✓
MCS_Lacto +ILC1*	C	X	X
C+ (bbT RFP)	T	✓	X
C-	T	X	X

## August 8th

**Experiment:** Bacterial culture for plasmid isolation

**Responsables:** Pablo Delgado

**Protocol code:** 5mL of Luria Bertani (LB) culture media supplemented with the respective antibiotic were inoculated with one transformed colony.

**Protocol modifications or specifications:** bbA -RFP and bbT-RFP were cultured

**Results:** bbT - RFP cultures did not show growing

## August 8th

**Experiment:** Index plate

**Responsables:** Pablo Delgado

**Protocol code:** standard lab procedures

**Protocol modifications or specifications:** Colonies from August 7th were strooke in a new plate to confirm their colour. The 4 white colonies of the Lin\_Sin2 + P3\_TetR part and 3 of the MCS were selected.

## August 8th

**Experiment:** Restriction

**Responsables:** Paula Thiel

**Protocol code:** Rest

**Protocol modifications or specifications:** IDT gBlocks were digested with EcoRI and PstI. Final concentration of DNA was 7.5ng/ $\mu$ L. Also, double amount of enzymes was used, and it was incubated for 4 hours at 37°C.

**Results:** No results needed.

## August 8th

**Experiment:** Ligation

**Responsables:** Pablo Delgado

**Protocol code:** Lig

**Protocol modifications or specifications:** Incubation took 20 hours at 16°C. Ligation was made as shown in the next table:

Upstream part	Insert part Volume ( $\mu$ L)	Backbone	Backbone Volume ( $\mu$ L)
Lin_C.diff	17.3	bbC RFP	0.5
Lin_S.aureus	17.3	bbC RFP	0.5
AgrC_AgrA_WT	17.3	bbC RFP	0.5
P3_ARNas_GFP	17.3	bbC RFP	0.5
P3_ARNas_Lisina	17.3	bbC RFP	0.5
MCS_Lacto	17.3	ILC1	0.5

**Results:** No results needed.

## August 9th

**Experiment:** Transformation

**Responsables:** Paula Thiel

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** Ligations from August 10th and August 6th were transformed.

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies

Lin_Sin2 + P3_GFP_Caract	T	X	X
Lin_Sin2 + P3_TetR	T	X	X
Lin_C.diff	C	X	X
Lin_S.aureus + bbC	C	X	X
P3_ARNas_GFP	C	X	X
P3_ARNas_Lisina	C	X	X
Prom_C.diff	C	X	X
MCS_Lacto	C	X	X
RFP_bbC (C+)	C	X	X
C-	C	X	X
RFP_bbT (C+)	T	X	X
C-	T	X	X

## August 9th

**Experiment:** Plasmid Isolation

**Responsables:** Paula Thiel

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name	Resistance	Concentration (ng/uL)	Absorbance
RFP_bbA	A	295.4	1.83
RFP_bbA	A	275.7	1.84

## August 9th

**Experiment:** Bacterial culture for plasmid isolation

**Responsables:** Paula Thiel

**Protocol code:** 5mL of Luria Bertani (LB) culture media supplemented with the respective antibiotic were inoculated with one transformed colony.

**Protocol modifications or specifications:** Transformed colonies from of Lin\_Sin2 + P3\_TetR from August 7th were cultured.

**Results:** No results needed.

## August 10th

**Experiment:** Streaking

**Responsables:** María José

**Protocol code:** standard lab procedure

**Protocol modifications or specifications:** One colony of *E. coli* DH5a was stroke in a LB plate.

**Results:** No results needed.

## August 10th

**Experiment:** Plasmid Isolation

**Responsables:** María José

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name	Resistance	Concentration (ng/uL)	Absorbance
Lin_Sin2 + P3_TetR (1)	T	341.4	1.86
Lin_Sin2 + P3_TetR (2)	T	172.3	1.87
Lin_Sin2 + P3_TetR (3)	T	185.4	1.91

## August 10th

**Experiment:** PCR

**Responsables:** María José

**Protocol code:** PCR

**Protocol modifications or specifications:** Samples amplified were the minipreps Lin\_Sin2 + P3\_TetR from the same day, Lin\_Sin2 from July 31th and P3\_TetR from July 30th. The reaction was prepared using REDTaq polymerase.

**Results:** PCR was made with less extension time of the corresponded.

## August 12th

**Experiment:** Plasmid Isolation

**Responsables:** María José

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name	Resistance	Concentration (ng/uL)	Absorbance
RFP_bbT	T	120.4	1.82

## August 12th

**Experiment:** PCR

**Responsables:** Pablo Delgado

**Protocol code:** PCR

**Protocol modifications or specifications:** Samples amplified were the minipreps Lin\_Sin2 + P3\_TetR from the August 12th, Lin\_Sin2 from July 31th and P3\_TetR from July 30th. The reaction was prepared using REDTaq polymerase.

Reactive	Volumen (uL)
Nuclease Free water	18.25
RedTaqBuffer 10X (Promega Buffer)	2.5
dNTP's	0.5
V2F Primer	0.25
VR Primer	0.25
RedTaq Polimerase	1.25
ADN (5ng/uL)	2

**Results:** No gene was amplified

### August 13th

**Experiment:** PCR

**Responsables:** Pablo Delgado

**Protocol code:** PCR

**Protocol modifications or specifications:** Samples amplified were the minipreps Lin\_Sin2 + P3\_TetR from the August 12th, Lin\_Sin2 from July 31th and P3\_TetR from July 30th. The reaction was prepared using REDTaq polymerase.

Reactive	Volumen (uL)
Nuclease Free water	15.25
RedTaqBuffer 10X (Promega Buffer)	2.5
dNTP's	2
V2F Primer	1
VR Primer	1
RedTaq Polimerase	1.25
ADN (5ng/uL)	2

**Results:** No band was observed

### August 13th

**Experiment:** Transformation

**Responsables:** Paula Thiel

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** Ligations from August 10th were transformed.



**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff	C	✓	✓
Lin_S.aureus + bbC	C	✓	X
P3_ARNas_GFP	C	✓	✓
P3_ARNas_Lisina	C	✓	✓
Prom_C.diff	C	✓	✓
MCS_Lacto	C	✓	X
RFP_bbC (C+)	C	✓	X
C-	C	X	X

**August 16th****Experiment:** Transformation**Responsables:** Paula Thiel**Protocol code:** Trans\_Ec**Protocol modifications or specifications:** Ligations from August 10th were transformed.**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff	C	✓	✓
Lin_S.aureus + bbC	C	✓	✓
P3_ARNas_GFP	C	✓	✓
P3_ARNas_Lisina	C	✓	✓
Prom_C.diff	C	✓	✓
MCS_Lacto	C	✓	X
RFP_bbC (C+)	C	✓	X
C-	C	X	X

**August 16th****Experiment:** Ligation**Responsables:** Paula Thiel**Protocol code:** Lig

**Protocol modifications or specifications:** Enzyme T4 used was a new one bought from NEB. 0.2µL of ligase (2.000.000 U/ml) was used. Incubation took 16 hours at 16°C. Ligation was made as shown in the next table:

Upstream part	Insert part Volume (µL)	Downstream part	Insert part Volume (µL)	Backbone	Backbone Volume (µL)
Lin_Sin2	6.5	P3_GFP_Caract	6.5	bbT RFP	0.5

**Results:** No results needed.

## August 17th

**Experiment:** Index plate

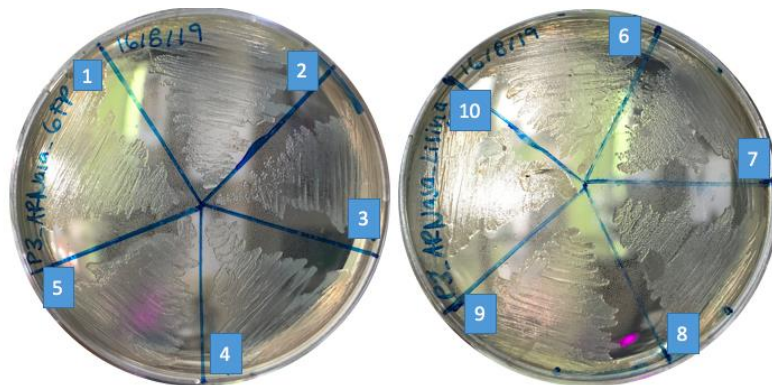
**Responsables:** María José

**Protocol code:** standard lab procedure

**Protocol modifications or specifications:** None

**Results:**

Name	Date	Number in index plate	
P3_ARNas_GFP	August 14 <sup>th</sup>	1-5	PCR
P3_ARNas_Lis	August 14 <sup>th</sup>	6-10	Colonies PCR



## August 17th

**Experiment:** Transformation

**Responsables:** María José

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** Ligation from August 16th was transformed.

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_Sin2 + P3_GFP_Caract	C	✓	X
RFP_bbC (C+)	C	✓	X
C-	C	X	X

## August 17th

**Experiment:** Index plate

**Responsables:** María José

**Protocol code:** standard lab procedure

**Protocol modifications or specifications:** None

**Results:**

Name	Date	Number in index plate
Lin_C.diff	August 13 <sup>th</sup>	11
Prom_C.diff	August 13 <sup>th</sup>	12-15
Lin_C.diff	August 16 <sup>th</sup>	16-18
Lin_S.aureus	August 16 <sup>th</sup>	19-21
Prom_C.diff	August 16 <sup>th</sup>	22-28
MCS_Lacto	August 16 <sup>th</sup>	29-31
Lin_Sin2 + P3_GFP_Caract	August 16 <sup>th</sup>	32-33



## August 19th

**Experiment:** Index plate

**Responsables:** María José

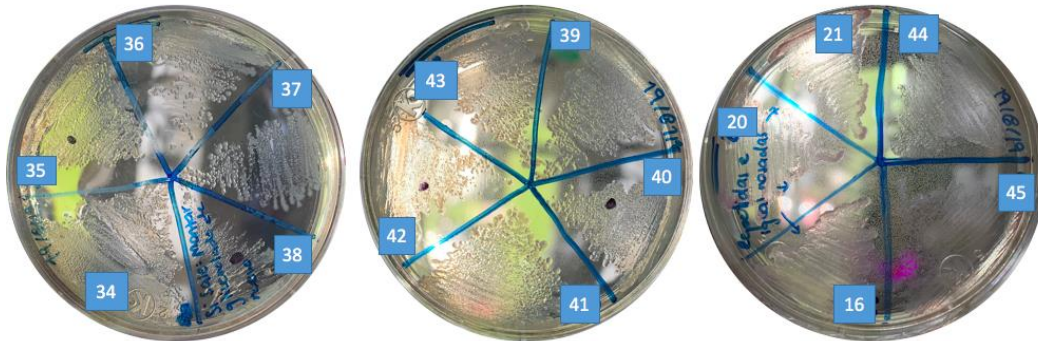
**Protocol code:** standard lab procedure

**Protocol modifications or specifications:** The colonies 16, 20 and 21 are the same as the index plate of August 17<sup>th</sup>.

**Results:**

Name	Date	Number in index plate	
Lin_Sin2 + P3_GFP_Caract	August 17 <sup>th</sup>	34-44	Only the PCR

Lin_C.diff	August 16 <sup>th</sup>	16 and 45	Red col
Lin_S.aureus	August 16 <sup>th</sup>	20 and 21	Repeat same r



## August 19th

**Experiment:** Plasmid Isolation

**Responsables:** María José

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30μL of nuclease free water.

**Results:**

Name	Resistance	Concentration (ng/uL)	Absorbance
P3_ARNas_GFP (1)	Cl	100	1.82
P3_ARNas_GFP (3)	Cl	90	1.63
P3_ARNas_GFP (5) -> Desechado	Cl	51.8	1.73
P3_ARNas_Lis (6) -> Desechado	Cl	42.6	1.70
P3_ARNas_Lis (8) -> Desechado	Cl	50.2	1.82
P3_ARNas_Lis (10) -> Desechado	Cl	60.7	1.84

## August 19th

**Experiment:** PCR

**Responsables:** María José

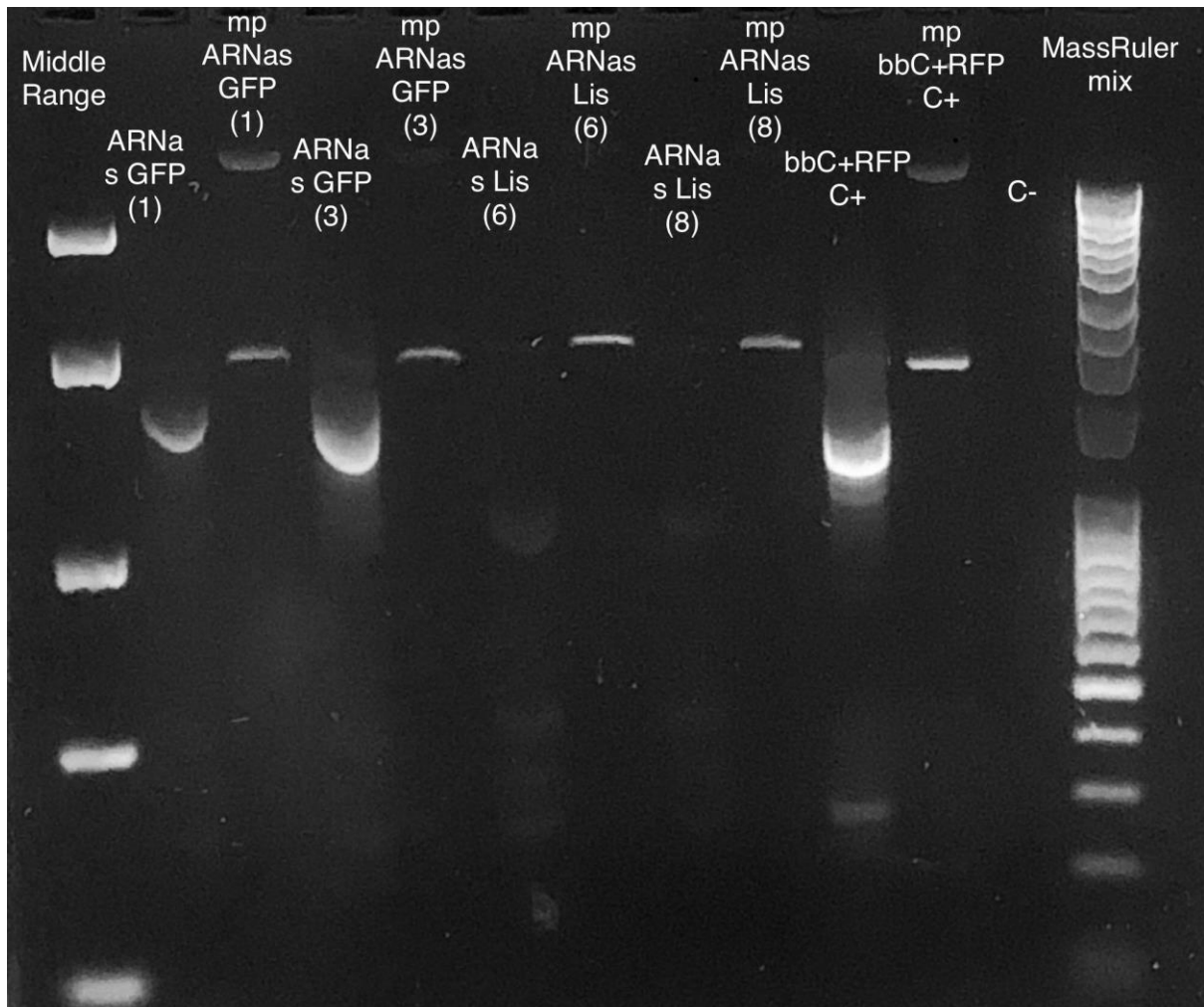
**Protocol code:** PCR

**Protocol modifications or specifications:** Samples amplified were the minipreps P3\_ARN\_GFP and P3\_ARNas\_Lis from the same day. The reaction was prepared using REDTaq polymerase.

Reactive	Volumen (uL)
Nuclease Free water	18.25
RedTaqBuffer 10X (Promega Buffer)	2.5

dNTP's	0.5
V2F Primer	0.25
VR Primer	0.25
RedTaq Polimerase	1.25
ADN (5ng/uL)	2

#### Results:



#### August 20th

**Experiment:** Plasmid Isolation

**Responsables:** María José

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name	Resistance	Concentration (ng/uL)	Absorbance
Lin_C.diff (17)	Cl	69.9	1.84
Lin_C.diff (18)	Cl	77.3	1.86
Prom_C.diff (22)	Cl	97.2	1.69
Prom_C.diff (25)	Cl	72.8	1.91
Prom_C.diff (28)	Cl	64.3	1.83

## August 20th

**Experiment:** PCR

**Responsables:** Paula Thiel

**Protocol code:** PCR

**Protocol modifications or specifications:** PCR made with the Lin\_C.diff and Prom\_C.diff variants was amplified using V2F and VR conditions and a extension of 1:30min.

**Results:** No amplification was observed

## August 20th

**Experiment:** Bacterial culture for plasmid isolation

**Responsables:** María José

**Protocol code:** 5mL of Luria Bertani (LB) culture media supplemented with the respective antibiotic were inoculated with one transformed colony.

**Protocol modifications or specifications:** White colonies from of August 19th indexed plate were cultured.

**Results:** No results needed.

## August 21th

**Experiment:** Plasmid Isolation

**Responsables:** María José

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name	Resistance	Concentration (ng/uL)	Absorbance
Lin_Sin2 + P3_GFP_Caract	Cl	535.7	1.86

## August 21st

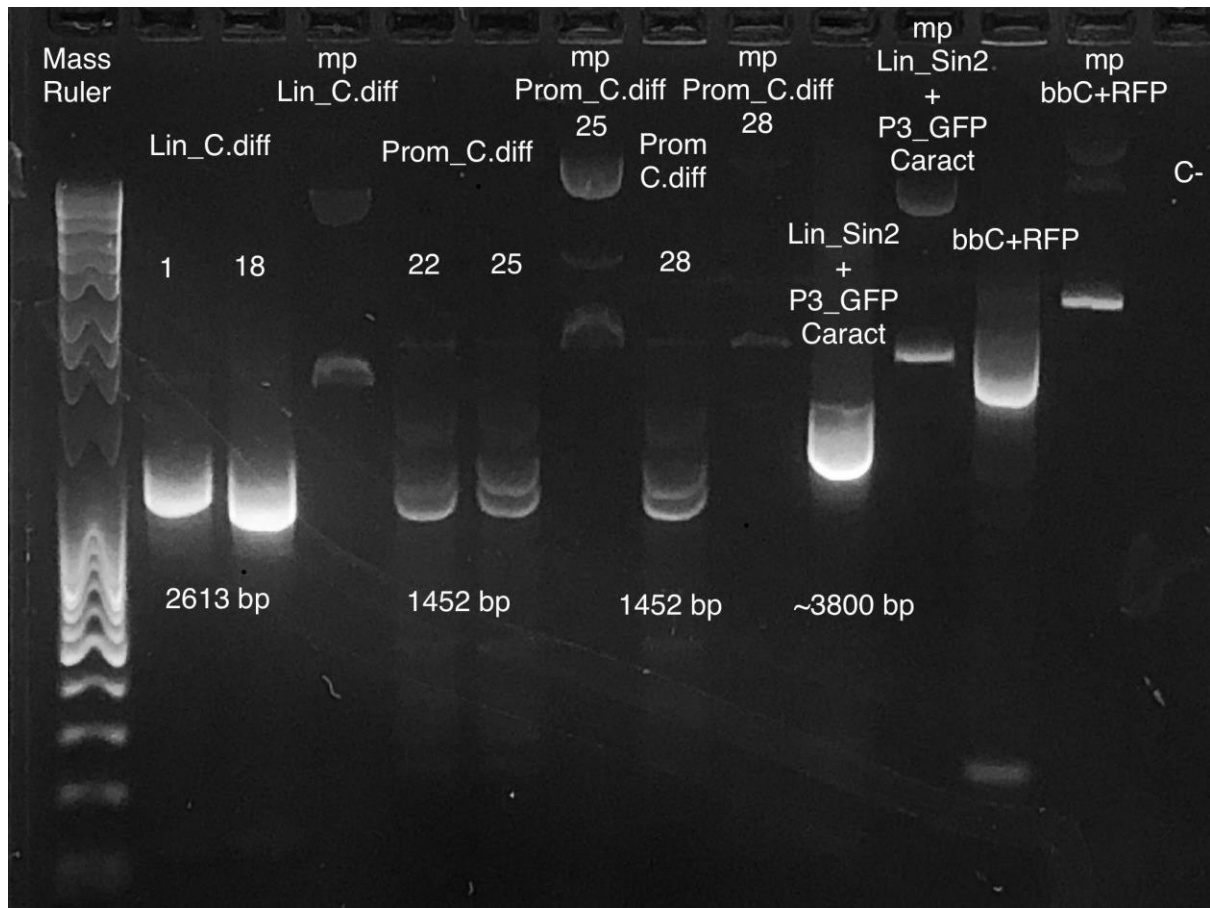
**Experiment:** PCR

**Responsables:** María José

**Protocol code:** PCR

**Protocol modifications or specifications:** PCR was made with the Lin\_Sin2 + P3\_GFP\_Caract miniprep from the same day and the samples amplified the day before (Lin\_C.diff and Prom\_C.diff). It was amplified using V2F and VR conditions and a extension of 3:45min.

**Results:**



## August 21st

**Experiment:** Transformation

**Responsables:** María José

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** Ligation from August 16th was transformed.

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff	C	X	✓
Lin_S.aureus	C	X	X
P3_ARNas_Lis	C	X	✓
Prom_C.diff	C	X	✓
MCS_Lacto	C	X	X
C+	C	✓	X
C-	C	X	X

## August 22nd

**Experiment:** Index plate

**Responsables:** Paula Thiel

**Protocol code:** stand lab procedure

**Protocol modifications or specifications:** White colonies from the transformation of August 19th were stroke.

**Results:**

Name	Number in index plate	Res
Prom_Cdiff	1-3	All w
P3_ARNas_Lis	4	Wh
Lin_C.diff	5	Re

## August 22nd

**Experiment:** Restriction

**Responsables:** Pablo Delgado

**Protocol code:** Rest

**Protocol modifications or specifications:** IDT gBlocks were digested with EcoRI and PstI. Parts used were: MCS\_lacto, Prom\_Cdiff, P3\_ARNas\_Lisina, Lin\_S.aureus, Lin\_Cdiff. Final concentration of DNA was 7.5ng/μL. Also, double amount of enzymes was used, and it was incubated for 4 hours at 37°C.

**Results:** No results needed.

## August 22nd

**Experiment:** Ligation

**Responsables:** Paula Thiel

**Protocol code:** Lig

**Protocol modifications or specifications:** Enzyme T4 used was a new one bought from NEB. 0.2μL of ligase (2.000.000 U/ml) was used. Incubation took 16 hours at 16°C. Ligation was made as shown in the next table:

Insert	Insert part Volume (μL)	Backbone	Backbone Volume (μL)
MCS_lacto	17.3	pRBA	0.5
Prom_Cdiff	17.3	bbC RFP	0.5
P3_ARNas_Lisina	17.3	bbC RFP	0.5
Lin_Saureus	17.3	bbC RFP	0.5
Lin_Cdiff	17.3	bbC RFP	0.5

**Results:** No results needed.

## August 22nd



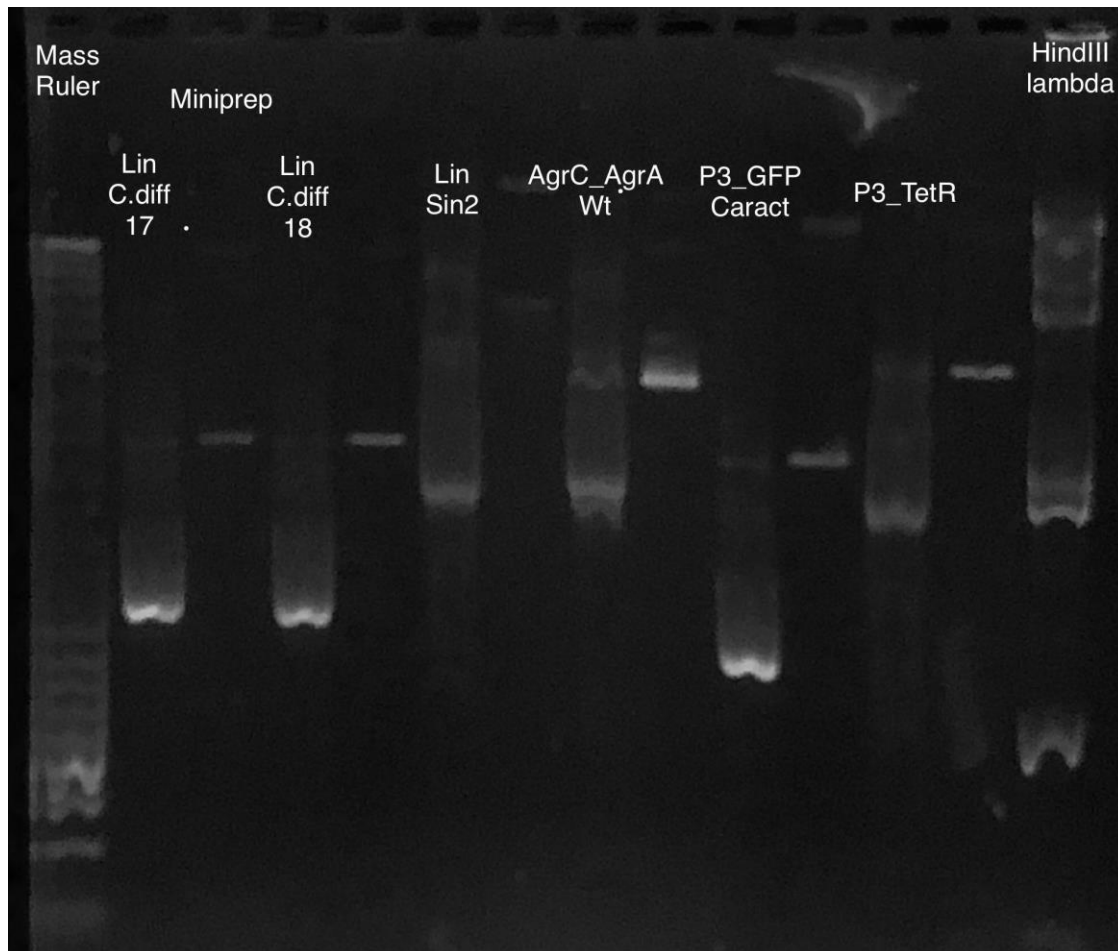
**Experiment:** PCR

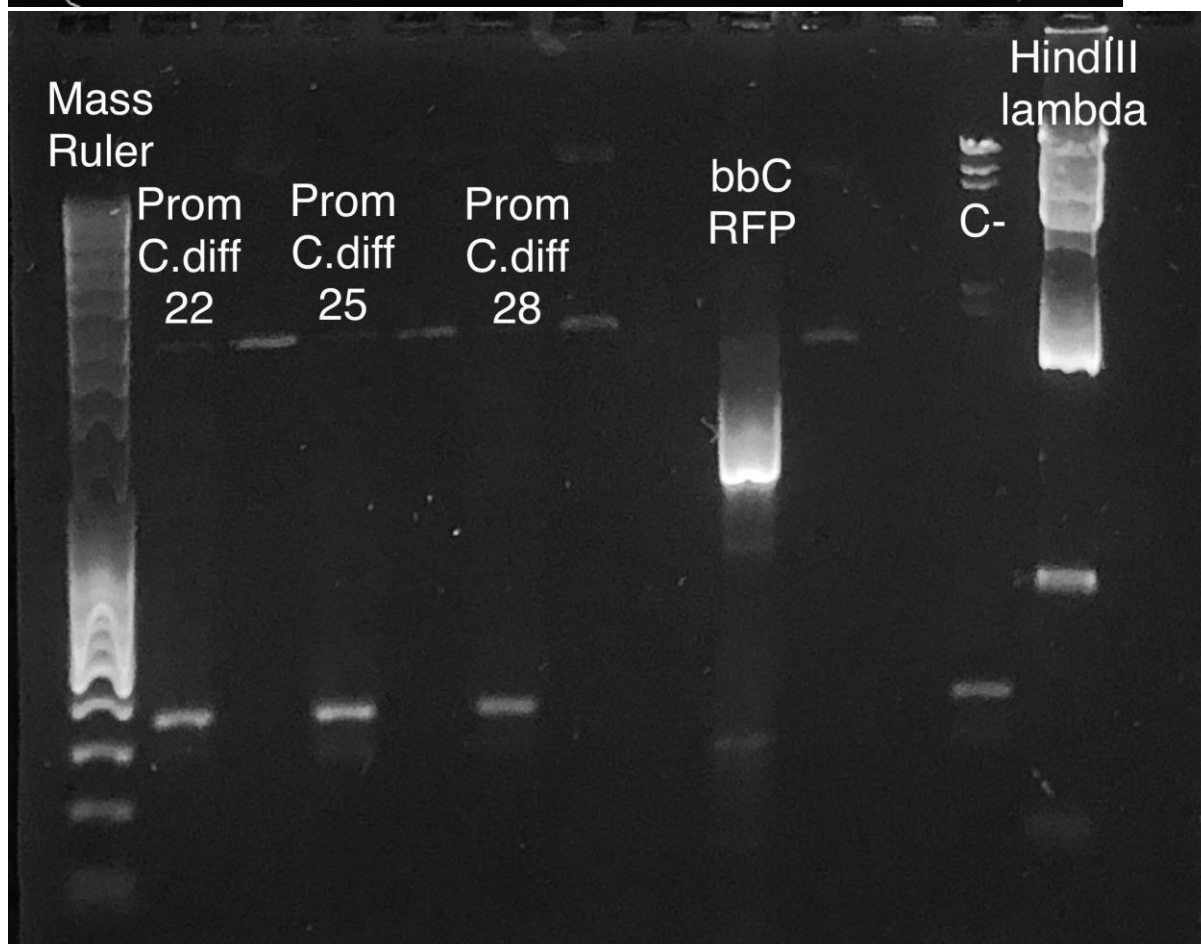
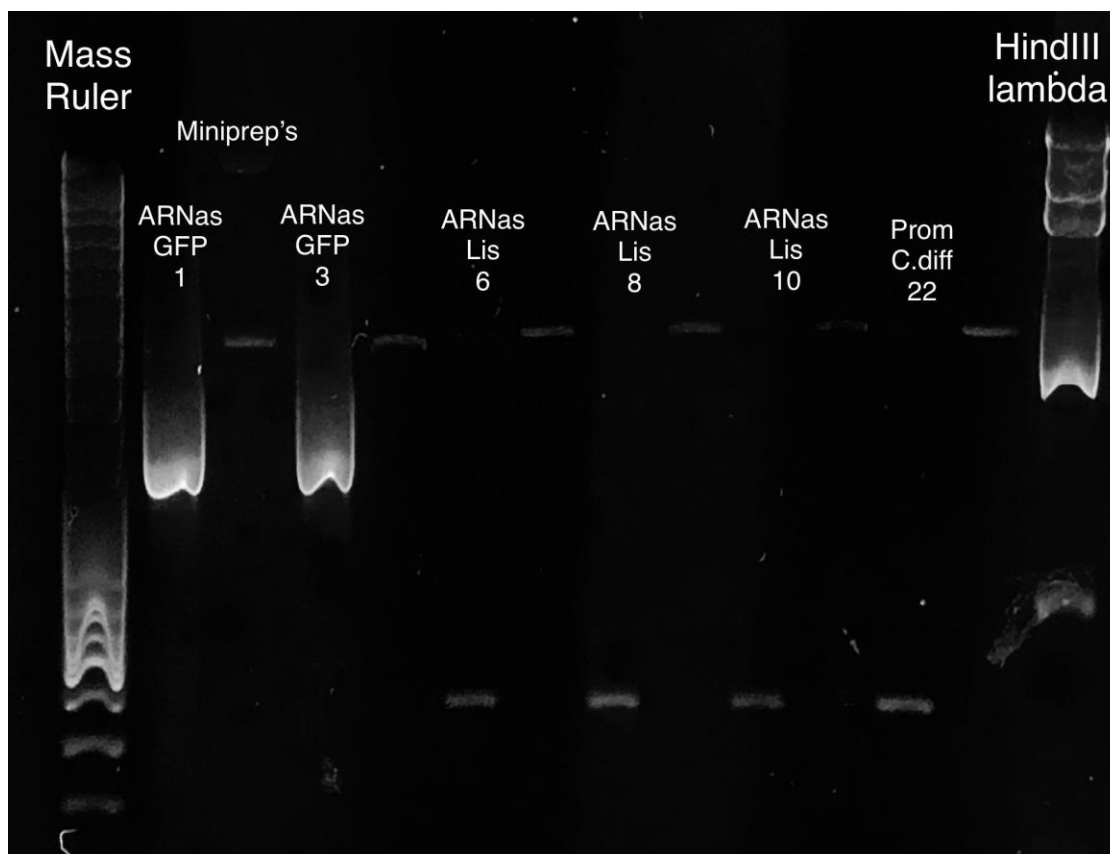
**Responsables:** Pablo Delgado

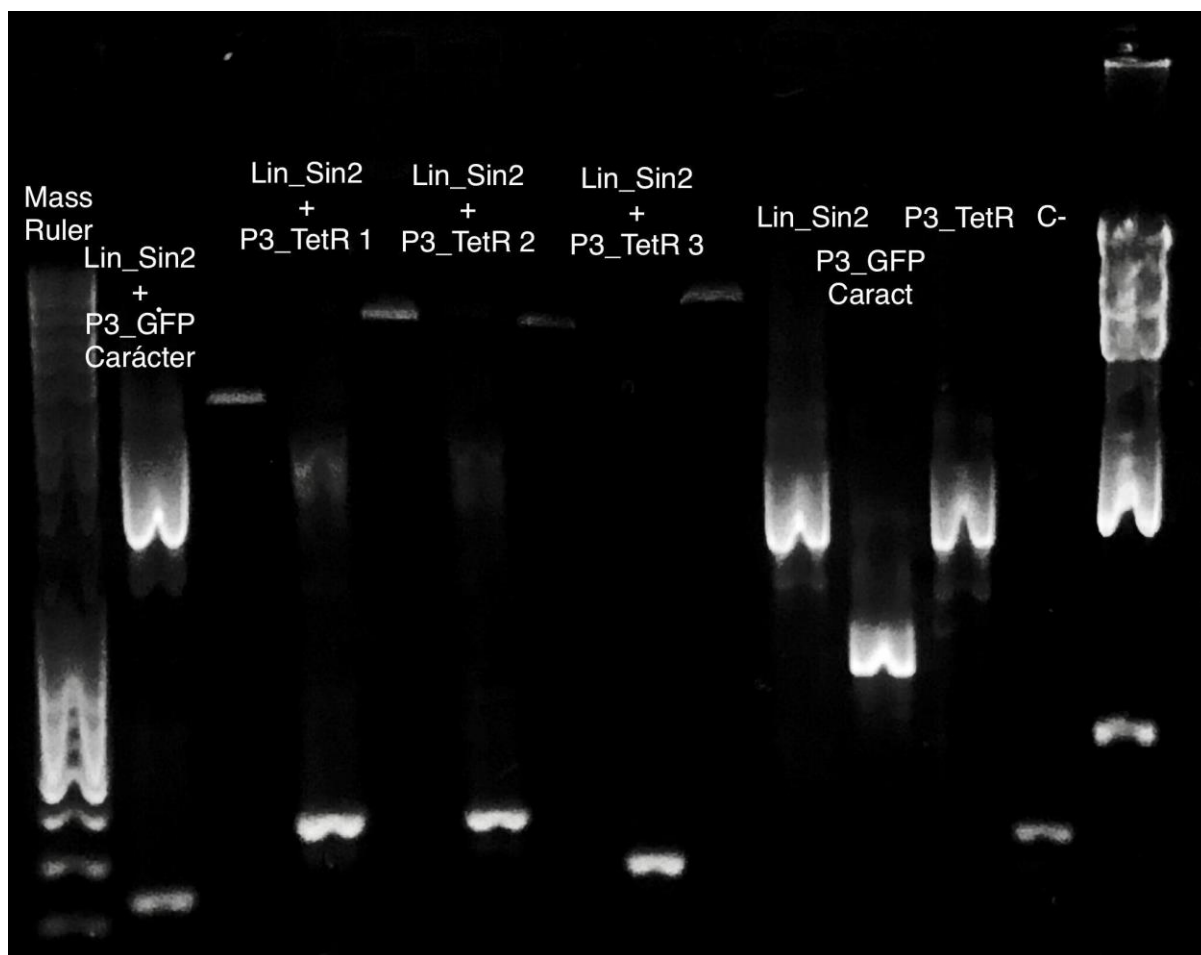
**Protocol code:** PCR

**Protocol modifications or specifications:** PCR of all parts present in miniprep was performed. It was amplified using V2F and VR (56°C) conditions and with an extension of 4:00 min.

**Results:**







Part	Status in Gel	Status in Sequencing	Part	Status in Gel	Status in Sequencing
Lin_C.diff (17)	X	-	P3_ARNas_Lis (8)	X	-
Lin_C.diff (18)	X	-	P3_ARNas_Lis (10)	X	-
Lin_Sin2	✓	-	Prom_C.diff (22)	X	-
AgrA_AgrC_WT	✓	-	Prom_C.diff (25)	X	-
P3_Caract	✓	-	Prom_C.diff (28)	X	-
P3_TetR	✓	-	Lin_Sin2 + P3_GFP_Caract	✓/X	-
P3_ARNas_GFP (1)	✓	-	Lin_Sin2 + TetR (1)	✓/X	-
P3_ARNas_GFP (3)	✓	-	Lin_Sin2 + TetR (2)	✓/X	-
P3_ARNas_Lis (6)	X	-	Lin_Sin2 + TetR (3)	X	-

## August 23rd

**Experiment:** Transformation

**Responsables:** Pablo Delgado

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** Ligations from August 22th were transformed.

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff + bbC RFP	C	✓	✓
Lin_S.aureus + bbC RFP	C	✓	✓
P3_ARNas_Lis + bbC RFP	C	✓	✓
Prom_C.diff + bbC RFP	C	✓	✓
MCS_Lacto + pRB-A	A	X	✓
C+ (bbC RFP)	C	✓	X
C-	C	X	X

## August 23rd

**Experiment:** Bacterial culture for plasmid isolation

**Responsables:** María José

**Protocol code:** 5mL of Luria Bertani (LB) culture media supplemented with the respective antibiotic were inoculated with one transformed colony.

**Protocol modifications or specifications:** White colonies from of august 22th indexed plate were cultured.

**Results:** No results needed.

## August 24th

**Experiment:** Plasmid Isolation

**Responsables:** Paula Thiel

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name.	Resistance	Concentration (ng/uL)	Absorbance
Prom C. diff (1) -> Desechado	C	256.7	1.85
Prom C.diff (2) -> Desechado	C	163.1	1.79
Prom c.diff (3) -> Desechado	C	214.9	1.84
P3 ARN lis (4)	C	280.4	1.83

## August 24th

**Experiment:** Index plate

**Responsables:** Paula Thiel

**Protocol code:** standard lab procedures

**Protocol modifications or specifications:** White colonies from the transformation of August 23rd were stroke.

Name	Number in index plate	Results
Prom_Cdiff	1-2-3	White
P3_ARNas_Lis	1	White
Lin_S.aureus	1-2	White
Lin_C.diff	-	Red

## August 24th

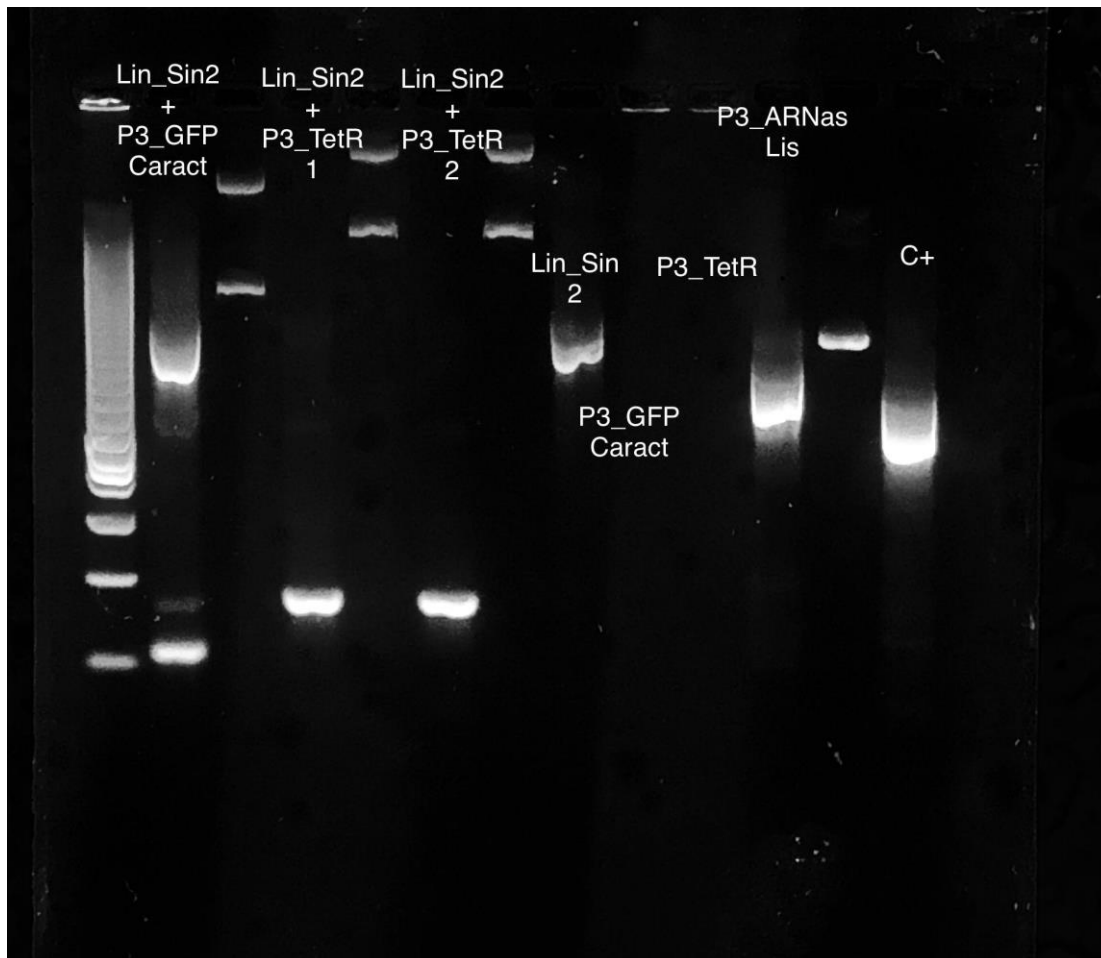
**Experiment:** PCR

**Responsables:** Paula

**Protocol code:** PCR

**Protocol modifications or specifications:** The following samples were amplified: PCR products from August 22nd of ligations Lin\_Sin2 + P3\_GFP\_Caract and Lin\_Sin2\_ + P3\_TetR, minipreps from August 24th and minipreps of Prom C.diff (colonies 22, 25 and 28). It was amplified using V2F and VR conditions and a extension of 4min. Products were run in a 1.6% agarose gel at 70V for 2 hours.

**Results:** Any of the Prom\_C.diff part presents an amplification.



## August 27th

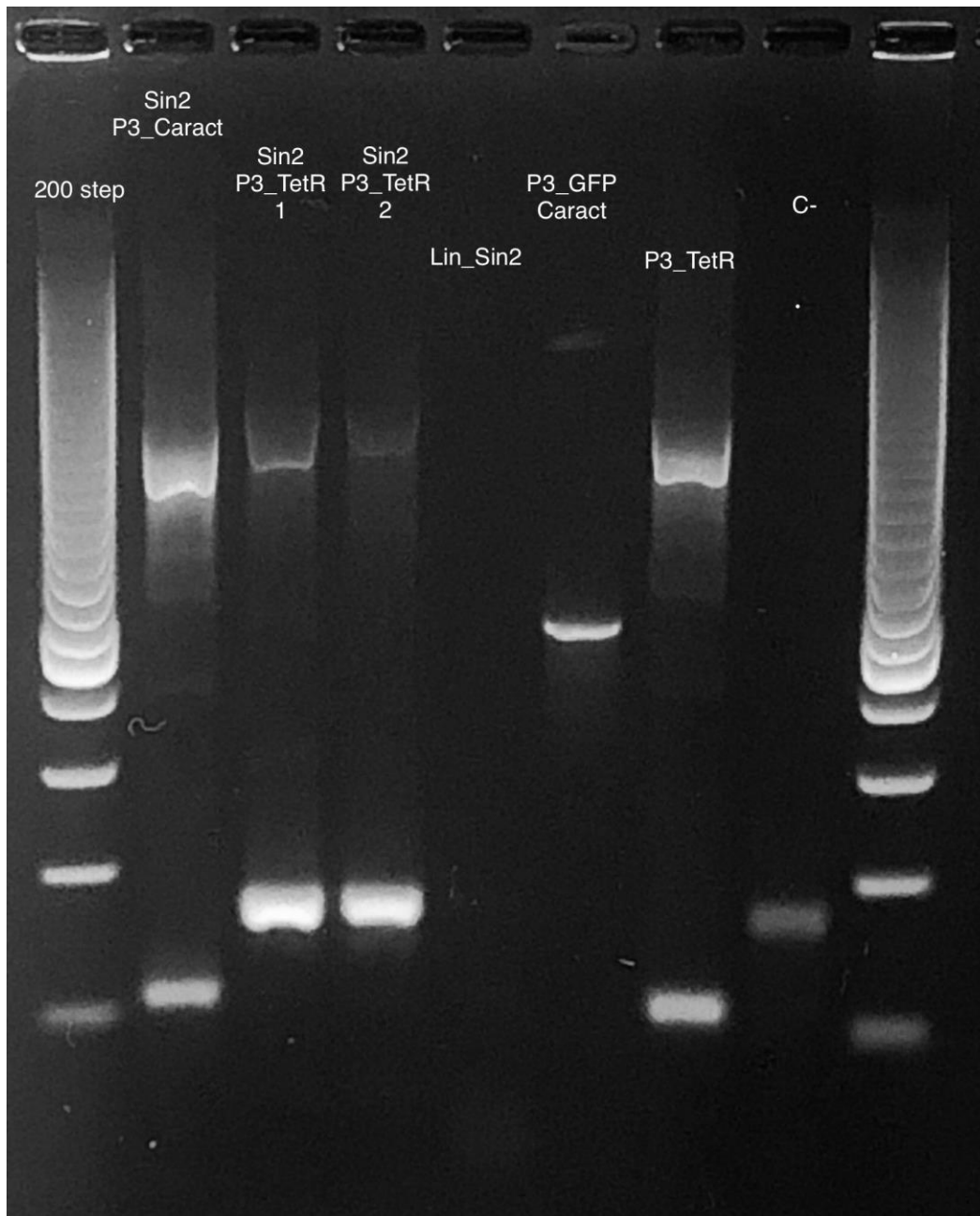
**Experiment:** PCR

**Responsables:** Paula and María José

**Protocol code:** PCR

**Protocol modifications or specifications:** The following samples were amplified: minipreps of Lin\_Sin2 + P3\_GFP\_Caract, Lin\_Sin2\_TetR (1), Lin\_Sin2\_TetR (2), Lin\_Sin2, P3\_GFP\_Caract and P3\_TetR. Each reaction was supplemented with 1uL of  $MgCl_2$  and they were amplified using V2F and VR primer. Reactions were incubated for 2 hours at room temperature and the thermocycler program was set with 1 min of denaturalization, 2 min of alignment at  $56^{\circ}C$  and 3:45 min of extension. Products were run in a 1.6% agarose gel at 70V for 2 hours.

**Results:**



**August 27<sup>th</sup>**

**Experiment:** Transformation

**Responsables:** Pablo Delgado

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** Ligations from August 22th were transformed.

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_C.diff + bbC RFP	C	✓	2
Lin_S.aureus + bbC RFP	C	✓	4

MCS_Lacto + pRB-A	A	X	6
C+ (bbC RFP)	C	✓	X
C-	C	X	X

## August 27th

**Experiment:** Bacterial culture for plasmid isolation

**Responsables:** Pablo Delgado

**Protocol code:** 5mL of Luria Bertani (LB) culture media supplemented with the respective antibiotic were inoculated with one transformed colony.

**Protocol modifications or specifications:** White colonies from August 24th indexed plate were cultured.

**Results:** No results needed.

## August 28th

**Experiment:** Plasmid Isolation

**Responsables:** Pablo Delgado

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name.	Resistance	Concentration (ng/µL)	Absorbance
Prom C. diff (1)	C	150.3	1.85
Prom C.diff (2)	C	105	1.85
Prom c.diff (3)	C	110	1.86
Lin_S.aureus (1)	C	70.7	1.88
Lin_S.aureus (2)	C	61.5	1.86

## August 28th

**Experiment:** PCR

**Responsables:** Pablo Delgado

**Protocol code:** PCR

**Protocol modifications or specifications:** The following samples were amplified: minipreps of Prom\_C.diff (1:3), Lin\_S.aureus (1:2). Each reaction was supplemented with 1µL of MgCl<sub>2</sub> and they were amplified using V2F and VR primer. Reactions were incubated for 1 hour at room temperature and the thermocycler program was set with 1 min of denaturalization, 1 min of alignment at 56°C and 3:00 min of extension. Products were run in a 1% agarose gel at 70V for 2 hours.

**Results:** No positive results were observed.

## August 28th

**Experiment:** Index plate

**Responsables:** Pablo Delgado

**Protocol code:** standard lab procedure



**Protocol modifications or specifications:** White colonies from the transformation of August 27th were stroke.

**Results:**

Name	Number in index plate	Results
Prom_C.diff	1-3	white colonies: index #2
Lin_S.aureus	1-4	white colonies: index #4

## August 29th

**Experiment:** Twist Clonal Genes resuspension

**Responsables:** Pablo Delgado

**Protocol code:** as indicated by the manufacturer

**Protocol modifications or specifications:** terminator Ter\_908 from Twist Bioscience and the AIP part (AgrB\_AgrD\_E.coli) were resuspended in NFW up to around 100 ng/ $\mu$ L.

Twist code	Laboratory name	Resistance	Concentration (ng/ $\mu$ L)
Terminador_BB_a_B0015	Ter_908	A	100
AgrB_AgrD_E.coli	AIP	A	100

**Results:** No results needed.

## August 29th

**Experiment:** Restriction

**Responsables:** Pablo Delgado

**Protocol code:** Rest

**Protocol modifications or specifications:** IDT gBlocks were digested with EcoRI and PstI. Parts used were: MCS\_lacto and Lin\_Cdiff. Also, double amount of enzymes was used. It was incubated by 1 hour at 37°C.

**Results:** No results needed.

## August 29th

**Experiment:** Restriction

**Responsables:** Pablo Delgado

**Protocol code:** Rest

**Protocol modifications or specifications:** Double amount of enzymes was used and it was incubated for 15 min at 37°C.

**Results:**

Part	Enzymes	Result
Lin_Sin2	E+S	✓
P3_ARNas_GFP	X+P	✓

P3_ARNas_Lisina	X+P	✓
AgrC_AgrA_Wt	E+S	Not Checked
Prom_C.diff	X+P	Not Checked
bbA	E+P	✓
bbK	E+P	✓

## August 29th

**Experiment:** Ligation

**Responsables:** Paula Thiel and Pablo Delgado

**Protocol code:** Lig

**Protocol modifications or specifications:** Enzyme T4 used was a new one bought from NEB. 0.2µL of ligase (2.000.000 U/ml) was used. Incubation took 16 hours at 16°C. Ligation was made as shown in the next table:

Upstream part	Insert part Volume (µL)	Downstream part	Insert part Volume (µL)	Backbone	Backbone Volume (µL)
Lin_Sin2	8.65	P3_ARNas_GFP	8.65	bbT RFP	0.5
Lin_Sin2	8.65	P3_ARNas_Lis	8.65	bbT RFP	0.5
AgrC_AgrA_WT		Prom_C.diff ( 1)		bbT RFP	0.5
Lin_C.diff		-	-	bbA RFP	
MCS_lacto		-	-	bbA RFP	

## August 30th

**Experiment:** Plasmid Isolation

**Responsables:** Paula Thiel

**Protocol code:** ThermoScientific Kit, K0503

**Protocol modifications or specifications:** At the final step, plasmidial DNA was eluted using 30µL of nuclease free water.

**Results:**

Name	Resistance	Concentration (ng/uL)	Absorbance
Lin_C.diff (2)	C	207.0	1.86
Lin_S.aureus (4) -> Descartado	C	161.1	1.85

## August 30th

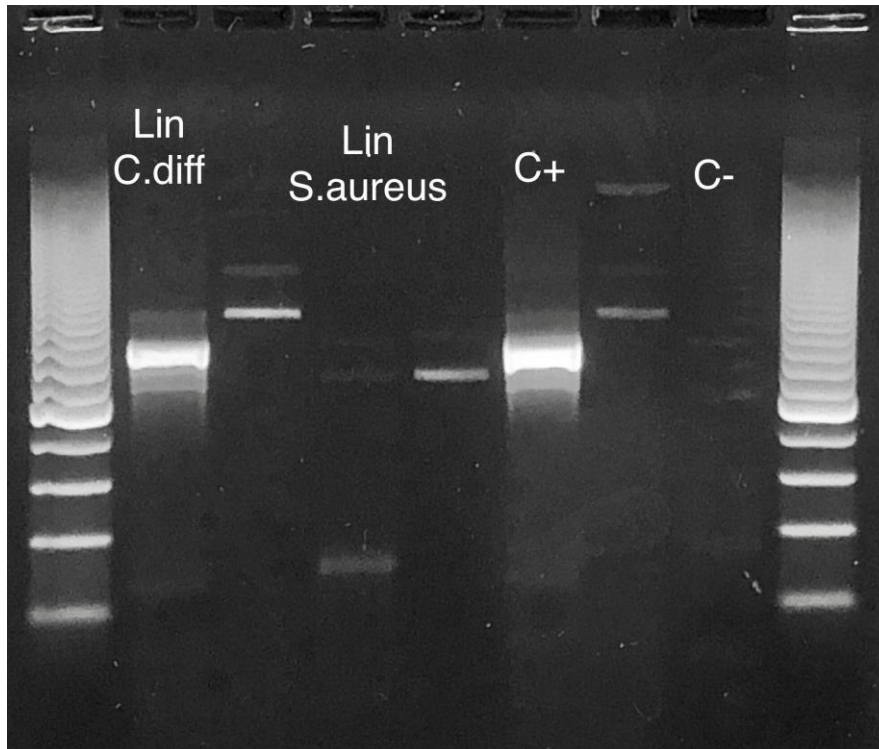
**Experiment:** PCR

**Responsables:** Paula and Pablo

**Protocol code:** PCR

**Protocol modifications or specifications:** Minipreps from August 30th were amplified using V2F and VR conditions and an extension time of 2:45 min. Products were run in a 1.2% agarose gel at 70V for 1 hour.

**Results:**



## August 30th

**Experiment:** Index plate

**Responsables:** Paula Thiel

**Protocol code:** standard lab procedure

**Protocol modifications or specifications:** White colonies from the transformation of August 29th were stroke.

**Results:**

Name	Number in index plate	Results
AgrB_AgrD_E.coli	1-2	✓
B0015	1-2	✓

## August 30th

**Experiment:** Transformation

**Responsables:** Pablo Delgado and Paula Thiel

**Protocol code:** Trans\_Ec

**Protocol modifications or specifications:** Samples transformed are the ligations from August 29th and the minipreps are specified in the following table.

**Results:**

Name	Resistance	Result	
		Red colonies	White colonies
Lin_Sin2 + P3_ARNas_GFP	T	✓	25
Lin_Sin2 + P3_ARNas_Lis	T	✓	1
AgrC_AgrA_WT + Prom_C.diff	T	✓	2
Lin_C.diff + bbA_RFP	A	✓	0
MCS_lacto + pRBA	A	X	X
C+ (bbT_RFP)	T	✓	X
C-	T	X	X
C-	A	X	X

## August 31st

**Experiment:** Index plate

**Responsables:** María José

**Protocol code:** standard lab procedures

**Protocol modifications or specifications:** White colonies from the transformation of August 30th were stroke.

**Results:**

Name	Number in index plate	Results
Lin_Sin2 + P3_ARNas_GFP	1-5	✓
Lin_Sin2 + P3_ARNas_Lis	6	✓
AgrC_AgrA_WT + Prom_C.diff	7-8	X