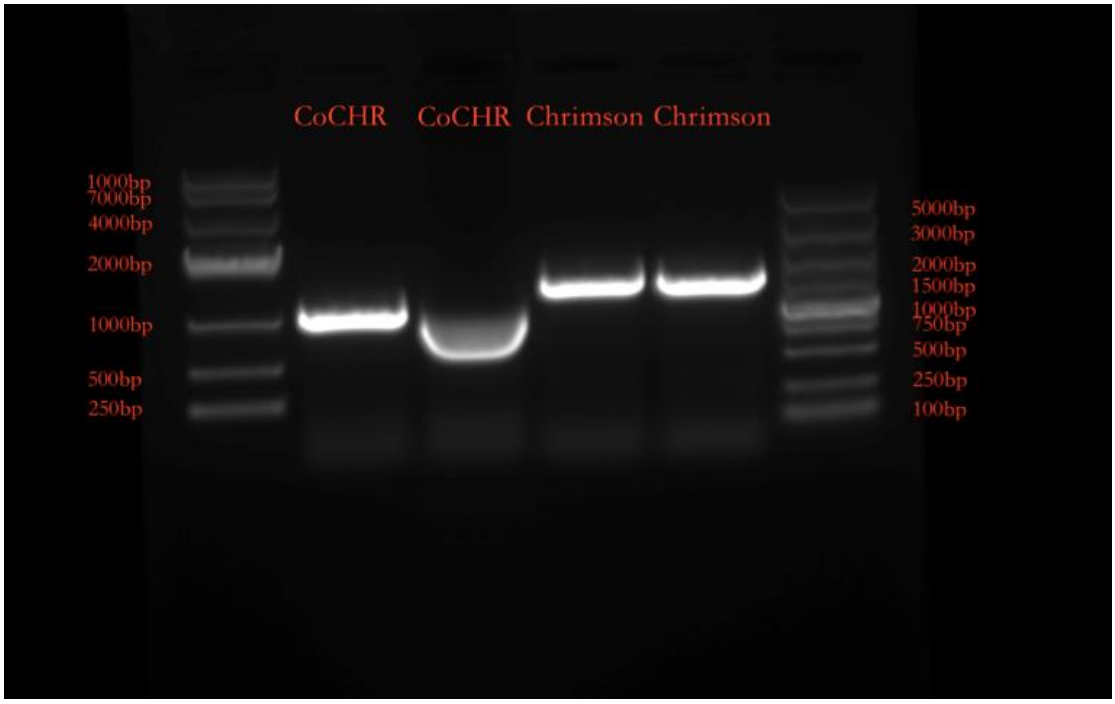
Molecular Biology and Biobrick Notebook

2017.05.07-2017.05.12

Construction of plasmid ord-10::CoCHR::GEM-GECO::mCherry.
Digest plasmid ord-10::CoCHR::GEM-GECO::mCherry with BglII and MfeI for backbone.
Digest plasmid with GEMgeco with MfeI and KpnI.
PCR CoCHR part and digest with Bgl II and KpnI.
Extract the backbone of ord-10::CoCHR::GEM-GECO::mCherry and the two inserts CoCHR and GEMgeco.
Do the ligation with T4 ligase over light.
Transformation of ord-10::CoCHR::GEM-GECO::mCherry.

Construction of plasmid Str-1::Chrimson::GEM-GECO::GFP:
Digest plasmid Str-1::Chrimson::GEM-GECO::GFP with BssHII and ApaI for backbone.
Digest plasmid with GEMgeco with ApaI and KpnI.
PCR Chrimosn part and digest with BssHII and KpnI.
Extract the backbone of Str-1::Chrimson::GEM-GECO::GFP and the two inserts Chrimson and GEMgeco .
Do the ligation with T4 ligase over light.
Transformation of Str-1::Chrimson::GEM-GECO::GFP.



Gel electrophoresis of PCR CoCHR and PCR Chrimson.
The length of CoCHR is 1000bp and the length of Chrimson is 1200bp.

2017.05.28- 06.11

Digest plasmid Str-1::Chrimson::GEM-GECO::GFP, GEMgeco, Chrimosn.
Then ligate and transform into E.coli.

Purify plasmids and did sequencing.

2017.06.19-06.22

Digest plasmid Str-1::Chrimson::GEM-GECO::GFP, GEMgeco, Chrimosn.
Then ligate and transform into E.coli.

2017.06.26-07.12

Construct plasmid ord-10::CoCHR::GEM-GECO::mCherry and Str-1::Chrimson::GEM-GECO::GFP.
Digest plasmid Str-1::Chrimson::GEM-GECO::GFP, GEMgeco, Chrimson.
Then ligate and transform into E.coli.
Digest plasmid ord-10::CoCHR::GEM-GECO::mCherry, GEMgeco, CoCHR, then ligate and transform into bacteria.
Purify plasmids and did sequencing.

2017.7.16

Construction of plasmid ord-10::CoCHR::GEM-GECO::mCherry and did PCR to confirm result. Not succeed.

2017.7.20-7.25

PCR mutant GEM-GECO and Digest plasmid ord-10::CoCHR::GEM-GECO::mCherry with BglII and MfeI for backbone.
Digest plasmid with GEMgeco with MfeI and KpnI.
Extract the backbone of ord-10::CoCHR::GEM-GECO::mCherry and the two inserts CoCHR and GEMgeco from gel. Ligation and Transformation.

2017.08.04-08.06

Construction of plasmid ord-10::CoCHR::GEM-GECO::mCherry:
Digest plasmid ord-10::CoCHR::GEM-GECO::mCherry with BglII and MfeI for backbone.
Digest plasmid with GEMgeco with MfeI and KpnI.
PCR CoCHR part and digest with Bgl II and KpnI.
Extract the backbone of ord-10::CoCHR::GEM-GECO::mCherry and the two inserts CoCHR and GEMgeco.
Do the ligation with T4 ligase over light.
Transformation of ord-10::CoCHR::GEM-GECO::mCherry.

Construction of Biobrick BBa_K2492003.
Digest plasmid pSB1C3 with EcoRI and PstI for backbone.
Digest plasmid with GEMgeco with MfeI and KpnI.
Extract the backbone of pSB1C3 and GEMgeco.
Do the ligation with T4 ligase over light.
Transformation of Biobrick BBa_K2492003.

Construction of Biobrick BBa_K2492001.

Digest plasmid pSB1C3 with EcoRI and PstI for backbone.
PCR CoCHR part and digest with Bgl II and KpnI.
Extract the backbone of pSB1C3 and CoCHR.
Do the ligation with T4 ligase over light.
Transformation of Biobrick BBa_K2492001

2017.09.03-09.05

Construction of plasmid ord-10::CoCHR::GEM-GECO::mCherry:
Digest plasmid ord-10::CoCHR::GEM-GECO::mCherry, GEMgeco, CoCHR, then ligate and transform into bacteria.

Construction of Biobrick BBa_K2492000.
Digest plasmid pSB1C3 with EcoRI and PstI for backbone.
Digest plasmid with GFP with EcoRI and ApaI.
Extract the backbone of pSB1C3 and GFP.
Do the ligation with T4 ligase over light.
Transformation of Biobrick BBa_K2492000.

2017.09.06

Purify plasmids and did sequencing. Successfully got plasmids.

2017.09.15

Construction of Biobrick BBa_K2492002.
Digest plasmid pSB1C3 with EcoRI and PstI for backbone.
Digest plasmid with mCherry with BbvCI and SpeI.
Extract the backbone of pSB1C3 and mCherry.
Do the ligation with T4 ligase over light.
Transformation of Biobrick BBa_K2492002.

Construction of Biobrick BBa_K2492004.
Digest plasmid pSB1C3 with EcoRI and PstI for backbone.
Digest plasmid with odr-10 with PstI and BglII.
Extract the backbone of pSB1C3 and odr-10.
Do the ligation with T4 ligase over light.
Transformation of Biobrick BBa_K2492004.