



iGEM 2009

wekelijkse meeting 17/9

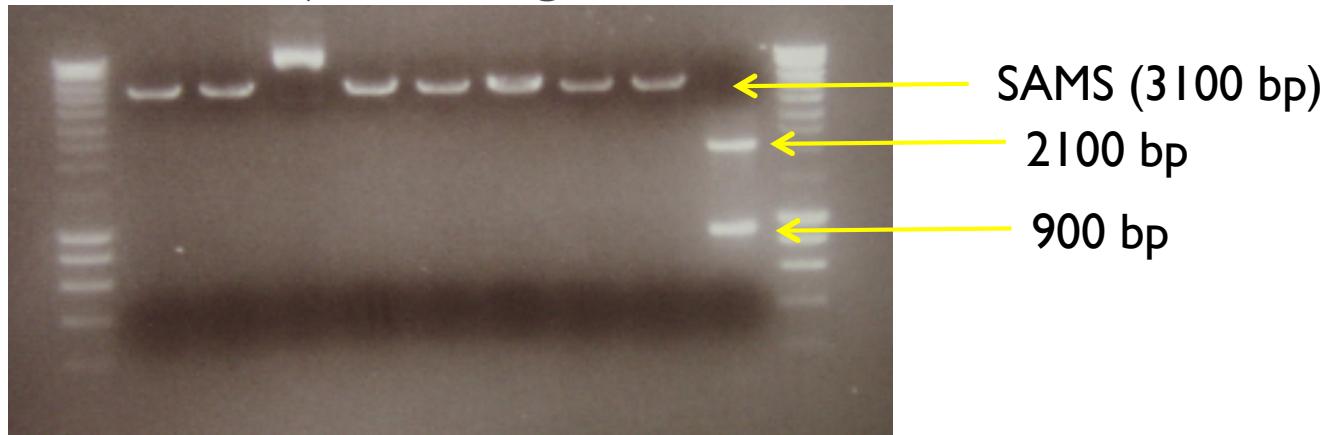
Vanille receptor

- ▶ A :- insertie in puc-vector is geslaagd
 - eerste mutatie (7u) faalde wegens te lange tijd waarschijnlijk, nieuwe PCR staat nu op voor eerste mutatie
- ▶ B : ligaties lukken niet, proberen met heat-shock?
- ▶ G : glycerolstock is aangemaakt en staal is opgestuurd voor sequencing
- ▶ R : TOPO-vector toonde geen resultaat, geprobeert in puc-vector maar wegens geen resultaat nieuw gevonden TOPO-protocol



Vanillin synthesis

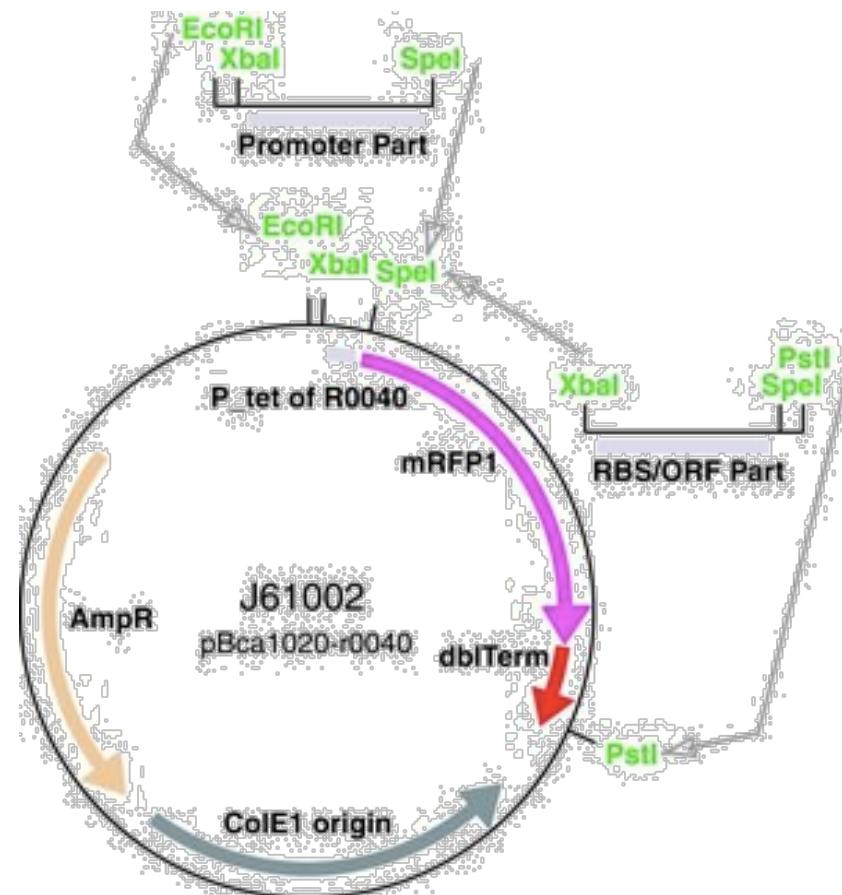
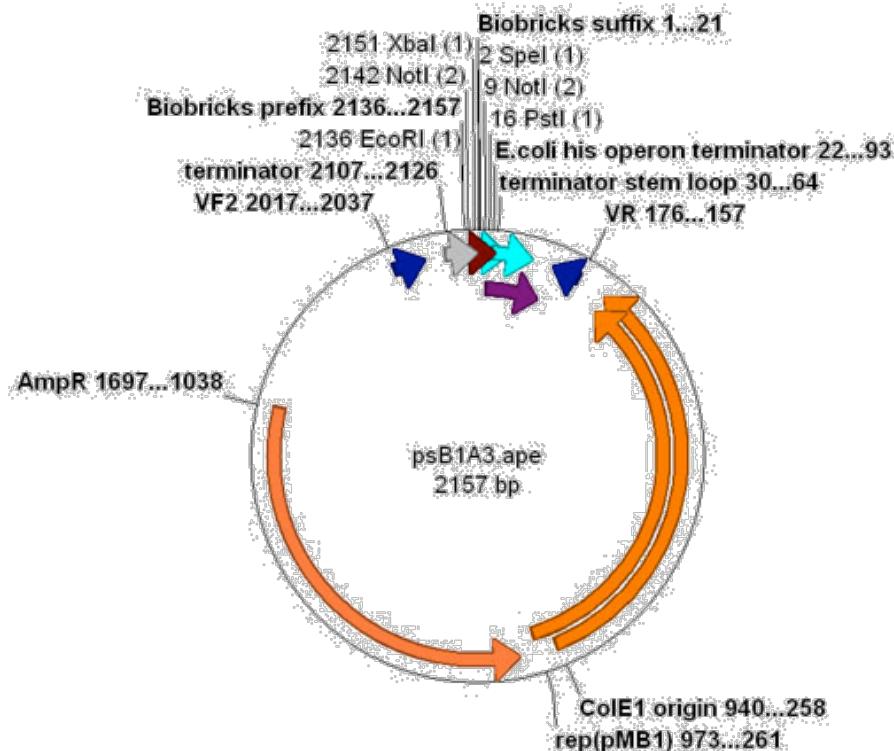
- ▶ Ligatie SAMS gelukt
 - ▶ 7 van de 8 juiste lengte



- ▶ EF + Terminator work in progress..
 - ▶ Nu gegroeid op Km platen (resistentie voor Km in TER vector)
 - ▶ Vandaag overgeplaat en op vloeibaar gezet
- ▶ EF en SAMS opgestuurd voor sequencing

Vanillin synthesis

- ▶ Promotor + SAMS ligatie
 - ▶ aanvankelijk gedacht dat deze in een andere vector zat



Blue light receptor

- ▶ Ligatie van de promotor in pSB1A2 is (waarschijnlijk) gelukt. (controle van fragment moet nog gebeuren)
- ▶ Ligatie van de promotor met GFP in pBR322, niet gelukt. (nog opnieuw proberen?)
- ▶ PCR van pSB3K3 dus vanavond ligatie met insert promotor+GFP inzetten.



Ribokey/lock

- ▶ Nog steeds niet ontvangen van GeneArt



Track selection

Voorlopig manufacturing

Have you ever heard of nanotechnology? Well, biology is a nanotechnology that already exists, and that actually works. The ribosome is a programmable nanoassembler embedded within a reproducing machine. Forget grey goo, we've got green goo, and it has already taken over the planet! Thus, could we responsibly use biology to manufacture useful products, from the nanoscale (atoms) to the decascale (buildings and bridges). What can biology be programmed to manufacture?

Andere mogelijkheden:

New Application

Food/Energy

Foundational Advance

Health/Medicine

Environment

Information Processing

Software Tools



▶ Best new application area

▶ We're guessing that you have great ideas that nobody has ever thought about, or if they have they forgot to tell somebody else. Can you imagine an entirely new application area for biological technology? Go for it. We'll celebrate you in front of the entire world

▶ Best foundational advance

▶ Modern biotechnology dates back to the invention of recombinant DNA technology, which lets people cut and paste pre-existing fragments of genetic material. That was only 35 years ago. In other words, biotechnology is a young adult, just entering its prime years. One thing that desperately needs doing is to develop improved tools and technologies that help to make the entire process of engineering biology easier. What foundational advance can you contribute that will take everybody's work forward?



Modeling

- ▶ Parameter schatting
[Vanillin receptor]

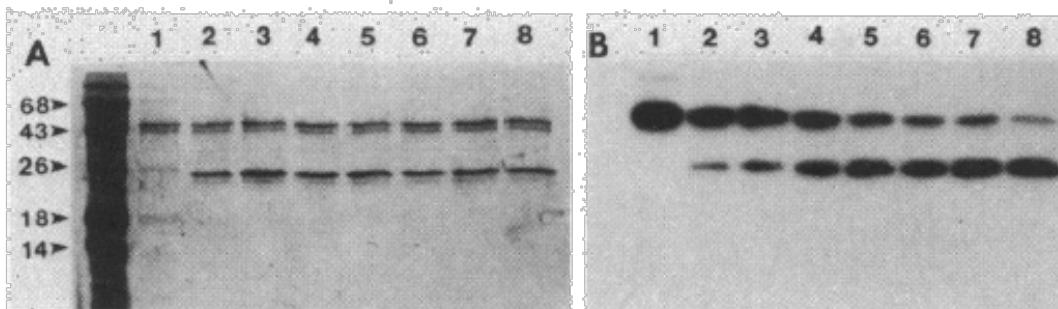


FIG. 2. Direct phosphoryl transfer from phospho-VirA681 to VirG. ATP-free phospho-VirA681 (0.3 µg) was incubated with VirG (0.3 µg) for different lengths of time. Lanes 1 to 8 are time points of 0, 5 s, 10 s, 30 s, 1 min, 2 min, 5 min, and 10 min, respectively. (A) Coomassie brilliant blue stain of the Immobilon blot. Molecular size standards are indicated to the left in kilodaltons. (B) Autoradiogram of the Immobilon blot.

$$\begin{aligned} K_{\text{phosphorylation}} = \\ 1.0E-6 \end{aligned}$$

Sponsoring

- Stand na de 3 iGEM maanden:
 - 100 bedrijven + 5 JA's = 6.500€
 - ReMYND: evt in het nieuwe boekjaar
- Deze week:
 - NEE: JIMtv, AMGEN (1 afdeling)
 - AMGEN polst andere afdelingen
 - Siemens misschien voor €500,-
- En verder:
 - Bedankbrief naar sponsors gestuurd
 - Tips voor volgend jaar neergeschreven



Rest

- ▶ Wiki verder upgedate
- ▶ Poster design
- ▶ Filmpje voor de uitleg van iGEM en ons project