

How to screen for your gene



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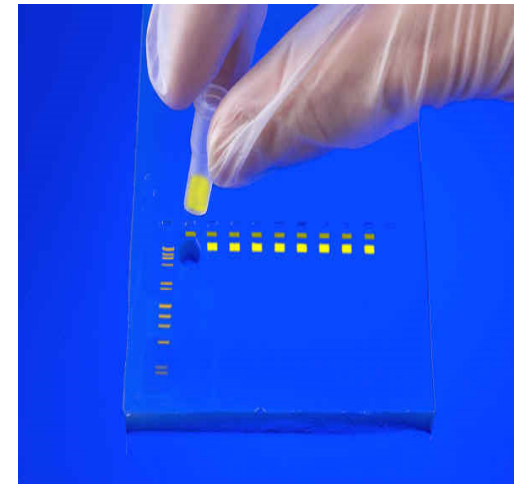
Big picture: Gene cloning

- From Gene to Protein
- Generally use bacteria as the “factory”



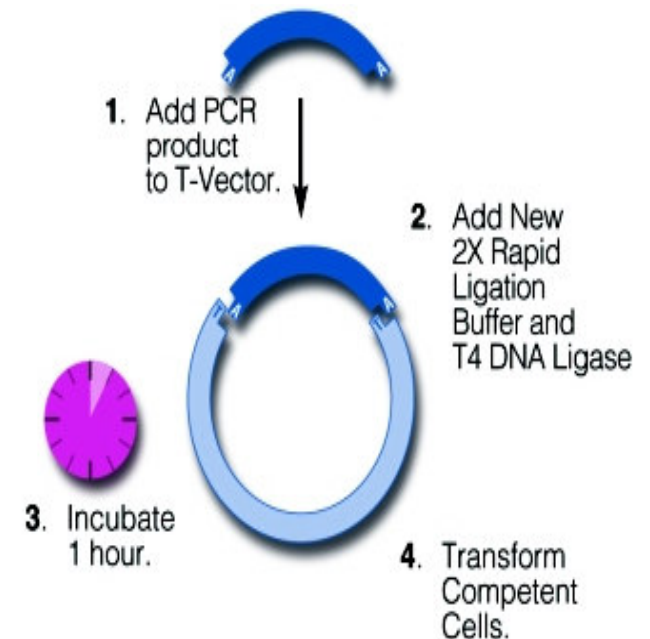
What we have done so far?

- Decide which gene to clone
- Designing primers
- PCR amplification (xx billions copies)
- Gel electrophoresis
- Cutting our gene from gel



What we have done so far? 2nd day

- TA ligation reaction
- Transformation (3 reactions)
- Plating on special Media



What is next



Screen for your gene

White blue screening



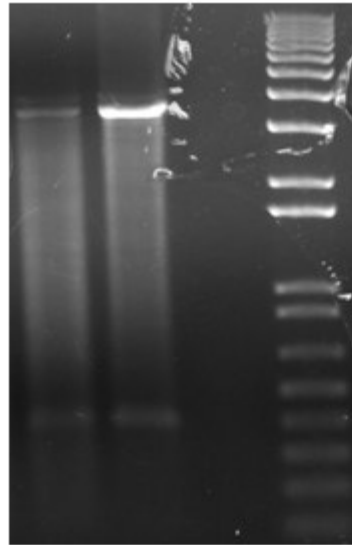
Plasmid Extraction & RE

- Two bands
(vector and gene)

- One band vector
only

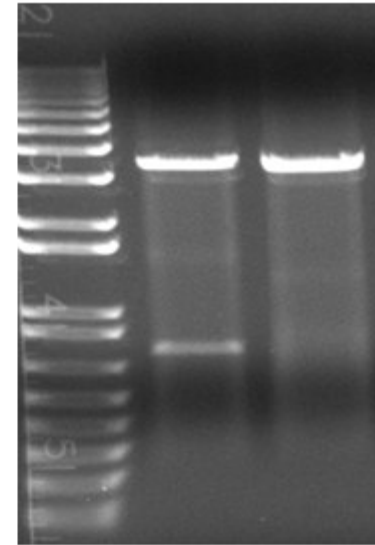
A

1 2 M



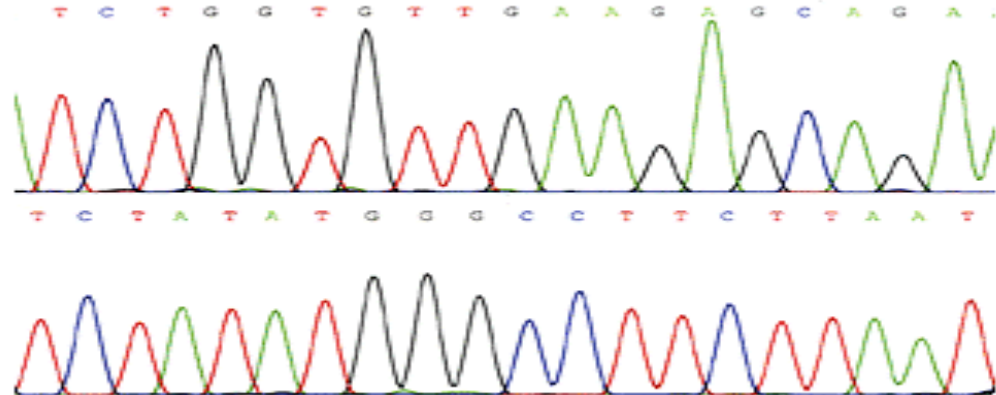
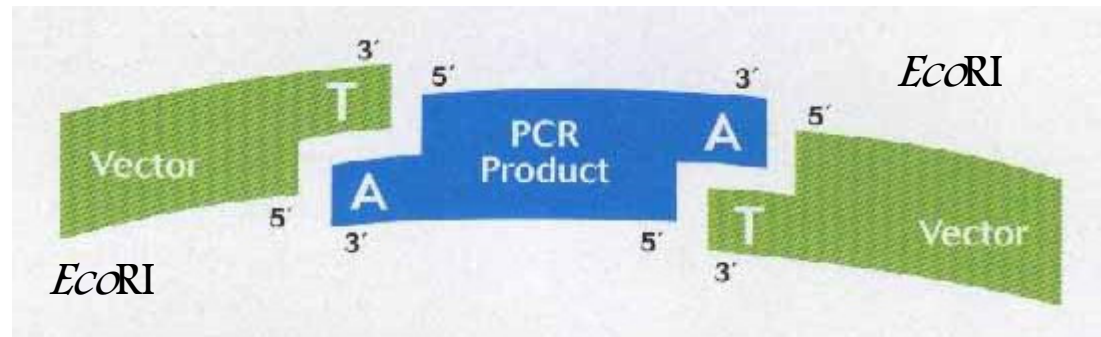
B

M 1 2



Sequencing several construct

Store
your
gene



Sentences you will probably never
read in a published paper:

"We were totally surprised it worked!"

"We just thought it'd be a neat thing to do."

"I'm only doing this to get tenure."

"Oops."

"Previous work by XXX et al. is actually pretty good!"

"To be honest, we came up with the hypothesis
after doing the experiment."

"The results are just 'OK'."

"Future work will... ah, who are we kidding?
We won't get more funding to do this."