

Plasmid Detox using pINT PL PR

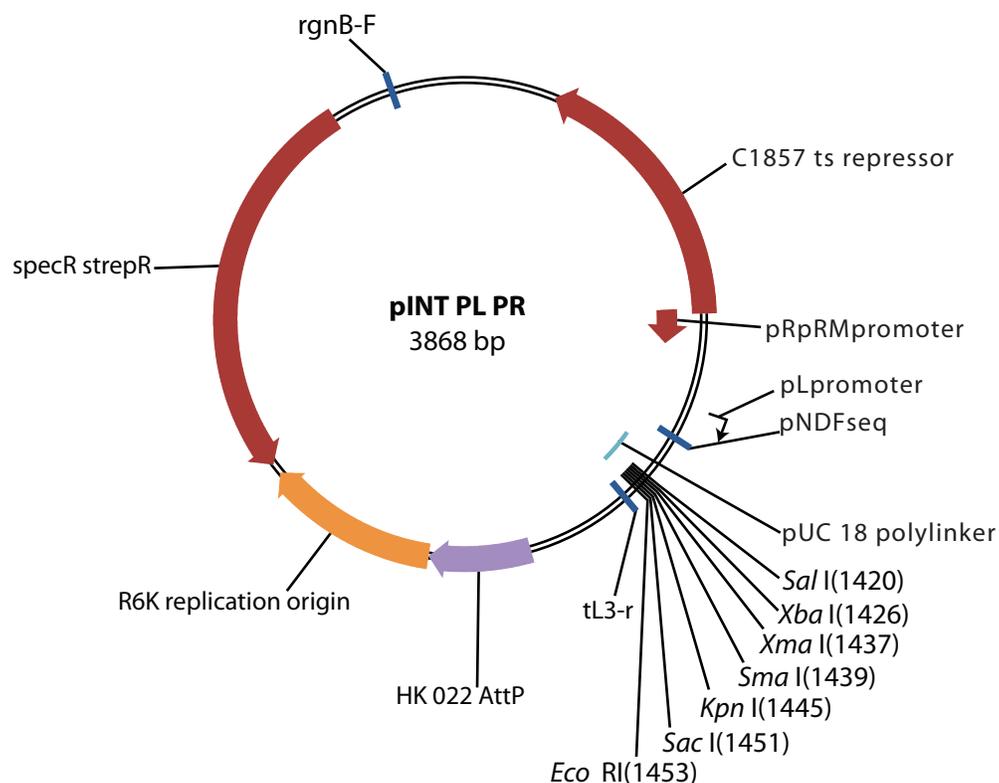
NTC strain engineering service for improving yields of toxic plasmids

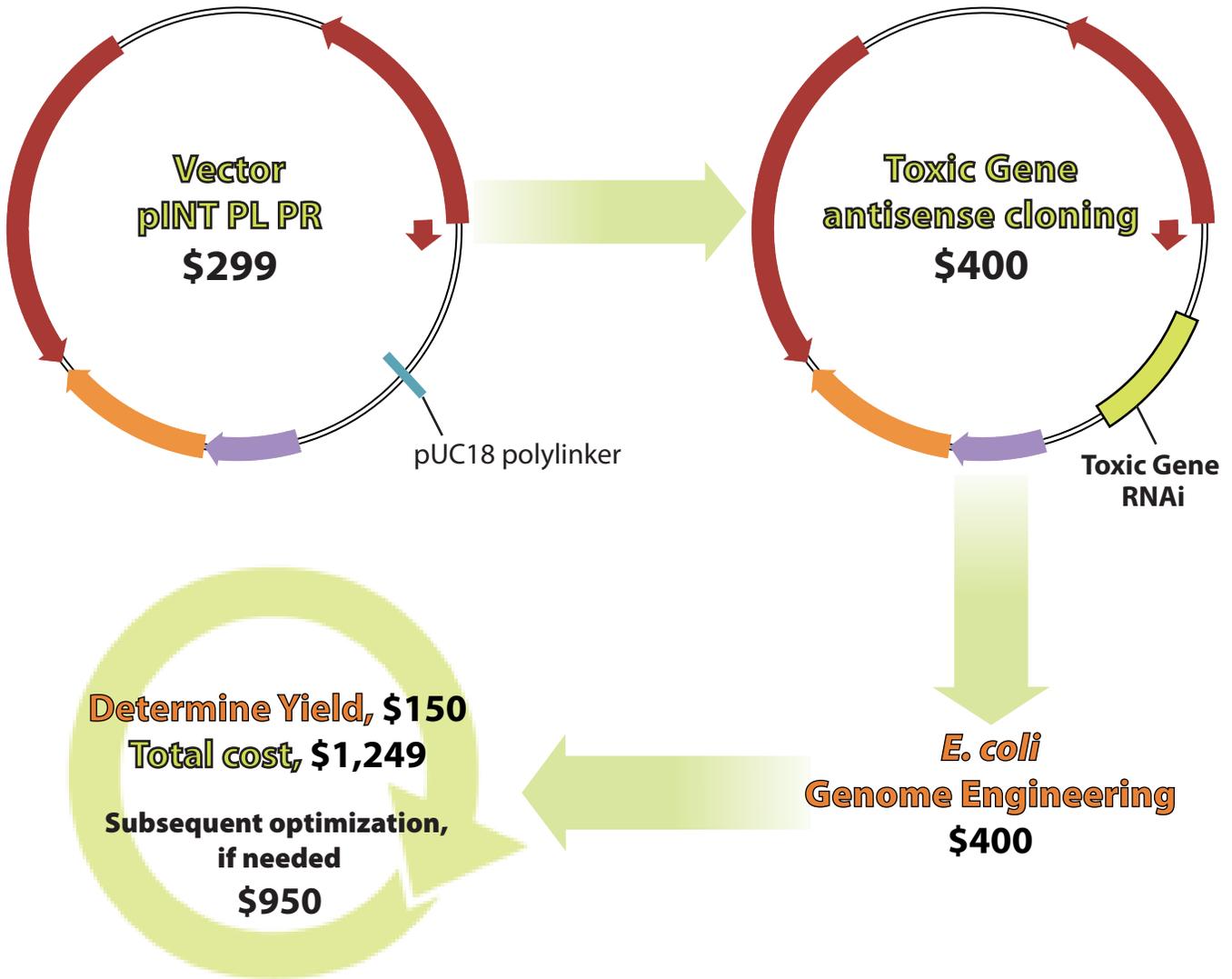
Plasmid yields in fermentation culture typically range up to 2g/L, or more, for plasmids with non-toxic inserts. However, some inserts are toxic to *E. coli*, making it difficult to grow the quantities needed, also resulting in plasmid loss, mutations and deletions.

NTC has devised a novel and economical strain engineering service, wherein the host strain chromosome of *E. coli* is modified to include a gene that is expressed as antisense to the plasmid-encoded toxic gene (1). Elimination of the toxic gene products allows the plasmid to be grown to the high levels needed for producing larger quantities of plasmid.

Plasmid Detox Advantages:

- **Easy** – NTC's pINT PL PR shuttle makes it fast and simple to knock down expression of toxic genes in *E. coli* during plasmid DNA production
- **Economical** - \$1,249 includes: vector; cloning; strain engineering; and testing
- **Effective** – Typical four-fold improvement in plasmid yield





Low copy pricing
(less economical)

Copy Improvement

High copy pricing
(more economical)