

TOPP Cells

Six strains of *E. coli* distantly related to *E. coli* K-12 have been observed to overproduce certain recombinant proteins. These strains, now available as TOPP competent cells (1-6), provide a rapid alternative for improving protein expression without subcloning

Our lab has the following TOPP Strains:

1. **TOPP 1**

3x10⁴ transformants per ug of DNA

2. **TOPP 2**

3x10⁴ transformants per ug of DNA

3. **TOPP 3**

1x10⁵ transformants per ug of DNA

4. **TOPP 4**

400 colonies per ug of DNA

5. **TOPP 5**

1.1x10⁵ transformants per ug of DNA.

Too much DNA seems to inhibit transformation and in these cells 1/1000 dilution seems to be the peak.

Note: These cells are sensitive to loss of F'-- need to be grown in presence of tetracycline or chloramphenicol at all times!

6. **TOPP 6**

1.1x10⁵ transformants per ug of DNA

Since there is no repressor, these cells overexpress protein constitutively.