

Pseudomonas aeruginosa Topo IV



Product Description (PAT4001, PAT4002 and PAT4003)

Pseudomonas aeruginosa topoisomerase IV is purified after heterologous expression in *E. coli* and is supplied as a complex of the subunits. The enzyme is supplied at a minimum concentration of 5 U/μl in Dilution Buffer. Store at -80°C. It is recommended that the enzyme is aliquoted to avoid repeated freeze-thaw cycles.

For *in vitro* laboratory research use only.

Dilution Buffer (1X)

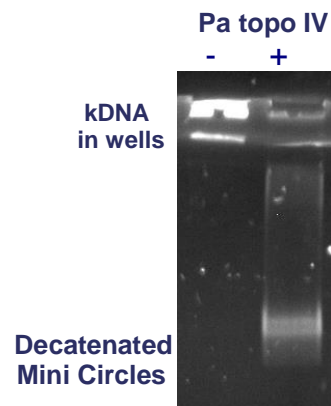
50 mM Tris.HCl (pH 7.6)
2 mM DTT
50 % (w/v) glycerol
1 mM EDTA
50 mM NaCl

Assay Buffer (supplied as 5X stock)

50 mM HEPES. KOH (pH 7.9)
6 mM magnesium acetate
4 mM DTT
1 mM ATP
100 mM potassium glutamate
2 mM spermidine
0.05 mg/ml albumin

Decatenation Assay

1 U of topoisomerase IV will decatenate 200 ng of kDNA when incubated in 1X assay buffer in a total reaction volume of 30 μl at 37°C for 30 minutes. Gels are run in the absence of Ethidium Bromide or Chloroquine.



Quality Control

- 1) Purity: *P. aeruginosa* topo IV is purified to > 95 % purity as judged by SDS-polyacrylamide gel electrophoresis.
- 2) No activity was detectable when the single subunits were assayed alone.
- 3) Decatenation activity was fully inhibited by ciprofloxacin at 100 μM.