

Vaccinia Virus Topoisomerase I



Product Description (Product Numbers VVT101 and VVT102)

Topoisomerase I is expressed recombinantly in *Escherichia coli*. The enzyme is supplied at a minimum concentration of 20 U/μl in Dilution Buffer. Store at -80°C.

It is recommended that the enzyme is aliquoted (undiluted) to avoid repeated freeze-thaw cycles.

For *in vitro* laboratory research use only.

Dilution Buffer

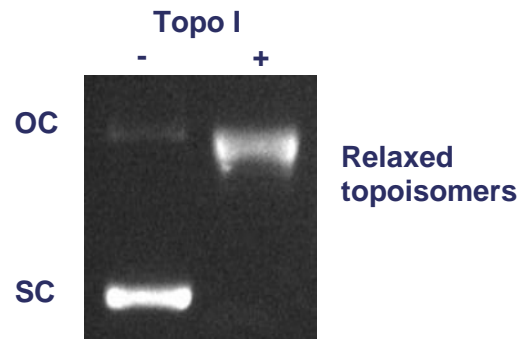
10 mM Tris.HCl (pH 7.5)
1 mM DTT
1 mM EDTA
50 % (w/v) glycerol
50 μg/ml albumin

Assay Buffer (supplied as 10X stock)

50 mM Tris.HCl (pH 7.9)
200 mM NaCl
0.25 mM EDTA
5 % (v/v) glycerol
50 μg/ml albumin

Relaxation Assay

1 U topoisomerase I is incubated with 0.5 μg of supercoiled pBR322 in a reaction volume of 30 μl at 37 °C for 30 minutes in Assay Buffer. Gels are run in the absence of ethidium bromide or chloroquine.



Quality Control

Endonuclease assay: 0.5 μg supercoiled pBR322 incubated with 0.5 U of vaccinia virus I for 6 hours at 37 °C shows no detectable conversion of supercoiled DNA to either open circular or linear forms when assayed by agarose gel electrophoresis.

Reference

Shuman S, Golder M, Moss B. (1988) Characterization of vaccinia virus DNA topoisomerase I expressed in *Escherichia coli*. *J Biol Chem.* 263 PP 16401-16407.