

M. tuberculosis Gyrase Assay Kit for cell extracts



Product Description (MTE001 and MTE00E)

The kit is designed for the detection of *M. tuberculosis* gyrase activity in cell extracts. Store at - 20 °C. Includes relaxed pBR322 DNA substrate, assay and dilution buffers and supercoiled pBR322 DNA marker.

For *in vitro* laboratory research use only.

Dilution Buffer (1X)

50 mM Tris.HCl (pH 7.9)
5 mM DTT
30 % (w/v) glycerol

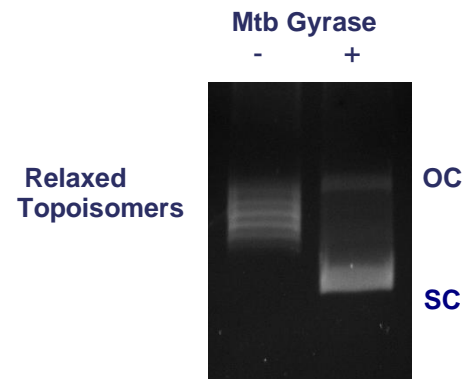
Assay Buffer (supplied as 5X stock)

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

Supercoiling Assay

1 U of *Mtb* gyrase/cell extract is incubated with 0.5 µg of relaxed 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

- 1) Purity: *M. tuberculosis* gyrase is purified to > 95 % purity as judged by SDS-polyacrylamide gel electrophoresis.
- 2) pBR322 was also incubated for 4 hrs in assay buffer + 10 mM MgCl₂ at 37 °C. These tests were negative for the formation of linear products, indicating the absence of nuclease contamination.
- 3) No activity was detectable when the single subunits were assayed alone