

DNA Gyrase Cat# 2000G
Bacterial (E. coli) DNA Gyrase

Description:

Highly purified E. coli gyrase is being offered as a holoenzyme (contains both A,B subunits). This is an excellent reagent for supercoiling plasmids in vitro or for novel drug screens.

Quality Control Tests:

Nuclease contamination: assayed by testing for linear KDNA and linear plasmid DNA formation. Incubation of 1 µg of catenated KDNA or supercoiled pUC19 DNA for 4 hrs. at 37 C (under gyrase assay conditions and with or without ATP).

Assay Conditions:

Supercoiling assays are carried out using relaxed pBR-322 DNA under conditions specified in the protocol sheets provided with the product. We also perform assays using kDNA as substrate. For details on this decatenation/supercoiling assay go here. We also have some technical literature on assays on our website. One unit of gyrase activity will supercoil 0.5 ug pBR-322 DNA in 30 min at 37 C. A 5X assay buffer and dilution buffer is included with the enzyme.

Storage and Shipping Conditions :

The enzyme is shipped on dry ice and should be stored at -70 C. We also recommend that the enzyme be aliquoted after the first thaw (repeated rounds of freeze/thaw will lead to loss of activity); the enzyme activity is stable for 1-2 days (not longer) on ice.