

## Native Human Topoisomerase II $\alpha$

Cat. No. NATE-0710

Lot. No. (See product label)

### Introduction

**Description** Topoisomerase II  $\alpha$  (TopoII $\alpha$ ) is a gene product with conserved catalytic activities and it promotes the progression of DNA damage. The  $\alpha$  isoform is present in proliferating cells.

**Applications** Topoisomerase II  $\alpha$  has been used in a study to assess aging processes in the human brain. Topoisomerase II  $\alpha$  has also been used in a study to investigate its activity in HIV-1 replication.

**Synonyms** type II DNA topoisomerase; DNA-gyrase; deoxyribonuclease topoisomerase; deoxyribonucleic topoisomerase; topoisomerase; DNA topoisomerase II; DNA topoisomerase (ATP-hydrolysing); EC 5.99.1.3; Topoisomerase II  $\alpha$ ; TOPO II

### Product Information

**Source** Human

**Form** liquid; Solution in 10 mM Tris-HCl, pH 7.1, 0.25 M NaCl, 1 mM EDTA, 0.5 mM PMSF, 1 mM 2-mercaptoethanol, 10% glycerol.

**EC Number** EC 5.99.1.3

**CAS No.** 37318-49-3

**Molecular Weight** mol wt 170 kDa

**Pathway** Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; G0 and Early G1, organism-specific biosystem; Mitotic G1-G1/S phases, organism-specific biosystem

**Function** ATP binding; DNA binding; DNA topoisomerase (ATP-hydrolyzing) activity; DNA-dependent ATPase activity; chromatin binding; drug binding; enzyme binding; histone deacetylase binding; nucleotide binding; protein C-terminus binding; protein binding; protein heterodimerization activity; protein homodimerization activity; protein kinase C binding; sequence-specific DNA binding; structure-specific DNA binding; ubiquitin binding

**Unit Definition** One unit will decatenate 0.2  $\mu$ g of kinetoplast DNA in 30 minutes at 37°C.

### Storage and Shipping Information

**Storage** -70°C