Creative Enzymes®

Native Human Topoisomerase II α

Cat. No. NATE-0710

Lot. No. (See product label)

Introduction

Description	Topoisomerase II α (TopoIIα) is a gene product with conserved catalytic activities and it promotes the progression of DNA damage. The α isoform is present in proliferating cells.
Applications	Topoisomerase II α has been used in a study to assess aging pr ocesses in the human brain. Topoisomerase II α has also been used in a study to investigate its activity in HIV-1 replication.
Synonyms	type II DNA topoisomerase; DNA-gyrase; deoxyribonucleate topoisomerase; deoxyribonucleic topoisomerase; topoisomerase; DNA topoisomerase II; DNA topoisomerase (ATP-hydrolysing); EC 5.99.1.3; Topoisomerase II α; 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 µg of kinetoplast DNA in 30 minutes at 37°C.

Storage and Shipping Information

Storage	−70°C