

## **Recombinant Human DNA Topoisomerase (TOP1)**

**Catalog No.** CSI13906A **Quantity**: 5 μg

CSI13906B 20 μg CSI13906C 1 mg

Alternate Names: DNA topoisomerase 1, EC 5.99.1.2, DNA topoisomerase I, TOP1, ScI-70.

**Description:** DNA Topoisomerase-I Human Recombinant produced in SF9 is a glycosylated,

polypeptide chain having a molecular mass of 91,576 Dalton (excluding glycosilation) 102 kDa total mass. The TOP1 is expressed with a -6xHis tag and purified by proprietary

chromatographic techniques.

Introduction: DNA toposisomerase I is a key nuclear enzyme that interconverts supercoiled DNA to the

required topological conformations for normal DNA replication and transcription. This enzyme is the target antigen for the so-called Scl-70 autoantibodies. Scl-70 antibodies are a specific marker in Scleroderma patients (specificity 98-100%) and are associated

with the presence of diffuse skin involvement and pulmonary fibrosis.

In human tissues the DNA topoisomerase I is initially synthesized as a protein with 100 kDa molecular weight. Most of this precursor is then proteolytically processed to a species with 70 kDa molecular weight from which the ScI-70 antigen has derived its

name.

**Gene ID:** 7150

Source: Sf9 insect cells

Formulation: TOP1 is supplied in 16mM HEPES buffer pH-7.5, 400mM sodium chloride, and 20%

glycerol.

**Purity:** Greater than 95% as determined by SDS-PAGE.

Physical

Appearance:

Sterile Filtered clear solution.

Storage & Stability: Store at 4°C if entire vial will be used within 2-4 weeks.

Store, frozen at -20°C for longer periods of time.

Avoid multiple freeze-thaw cycles.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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