

## Product datasheet

# Recombinant Human Topoisomerase I protein ab82095

### Overview

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| <b>Product name</b>   | Recombinant Human Topoisomerase I protein |
| <b>Protein length</b> | Protein fragment                          |

### Description

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|---------------|-------------|
| <b>Nature</b> | Recombinant |
| <b>Source</b> | Baculovirus |

### Amino Acid Sequence

|                    |                        |
|--------------------|------------------------|
| <b>Accession</b>   | <a href="#">P11387</a> |
| <b>Species</b>     | Human                  |
| <b>Amino acids</b> | 1 to 197               |

### Specifications

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Our [Abpromise guarantee](#) covers the use of **ab82095** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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| <b>Biological activity</b> | 0.1 - 10 units (ng) have been tested for an in vitro relaxation assay in a 20 µl reaction and contain no detectable DNA relaxation activity. |
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| <b>Applications</b> | SDS-PAGE |
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|             |        |
|-------------|--------|
| <b>Form</b> | Liquid |
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### Preparation and Storage

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| <b>Stability and Storage</b> | Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.<br>Preservative: None<br>Constituents: 20% Glycerol, 20mM Tris Cl, 100mM Potassium chloride, 1mM DTT, 0.2mM EDTA, pH 8.0 |
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### General Info

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| <b>Function</b> | The reaction catalyzed by topoisomerases leads to the conversion of one topological isomer of |
|-----------------|---|

DNA to another.

**Involvement in disease**

Note=A chromosomal aberration involving TOP1 is found in a form of therapy-related myelodysplastic syndrome. Translocation t(11;20)(p15;q11) with NUP98.

**Sequence similarities**

Belongs to the eukaryotic type I topoisomerase family.

**Post-translational modifications**

Sumoylated. Lys-117 is the main site of sumoylation. Sumoylation plays a role in partitioning TOP1 between nucleoli and nucleoplasm. Levels are dramatically increased on camptothecin (CPT) treatment.

**Cellular localization**

Nucleus > nucleolus. Nucleus > nucleoplasm. Diffuse nuclear localization with some enrichment in nucleoli. On CPT treatment, cleared from nucleoli into nucleoplasm. Sumoylated forms found in both nucleoplasm and nucleoli.

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