Product datasheet

Anti-Topoisomerase II alpha antibody ab12318

Overview

Product name: Anti-Topoisomerase II alpha antibody
Description: Rabbit polyclonal to Topoisomerase II alpha
Host species: Rabbit
Tested applications: Suitable for: IHC-P, WB, IP
Species reactivity: Reacts with: Human

Predicted to work with: Mouse, Chimpanzee, Rhesus monkey, Gorilla, Orangutan

Immunogen: Synthetic peptide representing a portion of human DNA topoisomerase II, alpha isozyme encoded within exon 35 (LocusLink ID 7153).

Positive control: HeLa cells. IHC-P: FFPE human testis tissue sections.

General notes: Centrifuge tube to remove product from lid.

Properties

Form: Liquid
Storage instructions: Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer: Preservative: 0.1% Sodium azide
Constituents: 0.021% PBS, 1.764% Sodium citrate, 1.815% Tris

Purity: Immunogen affinity purified
Purification notes: Purified using the peptide immobilized on solid support.
Clonality: Polyclonal
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab12318 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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<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
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<tbody>
<tr>
<td>IHC-P</td>
<td></td>
<td>Use at an assay dependent concentration.</td>
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### Target

**Function**
Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks.

**Sequence similarities**
Belongs to the type II topoisomerase family.

**Post-translational modifications**
Phosphorylation has no effect on catalytic activity.

**Cellular localization**

### Images

Immunochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human laryngeal squamous cell carcinoma labelling Topoisomerse II alpha with ab12318 at 1/1000 (1µg/ml). Detection: DAB.

**Notes**

<table>
<thead>
<tr>
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<tr>
<td>WB</td>
<td>⭐⭐⭐⭐⭐️</td>
<td>1/10000 - 1/30000. Detects a band of approximately 178 kDa (predicted molecular weight: 184 kDa).</td>
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<tr>
<td>IP</td>
<td></td>
<td>Use at 2-10 µg/mg of lysate.</td>
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IHC image of Topoisomerase II alpha staining in human testis formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab12318, 1 µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Detection of Human Topo II Alpha by Western Blot and Immunoprecipitation.

Samples: Whole cell lysate (25 mcg/lane for A; 0.5 mg for IP in B; 25 mcg for Input in B) from HeLa cells. Antibodies: Affinity purified rabbit anti-Topo II alpha antibody BL983 used at the indicated concentrations for WB (A) and IP (B). Control antibody (Ctrl. in A) and antibody for WB of immunoprecipitated Topo II alpha was a monoclonal antibody to Topo II alpha from another source. Detection: Chemiluminescence with exposure times of 5 minutes (A) or 30 seconds (B).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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