


# Anti-Topoisomerase I antibody ab85038

★★★★★ [4 Abreviews](#) [7 References](#) [4 图像](#)

### 概述

|       |   |
|-------|---|
| 产品名称  | Anti-Topoisomerase I 抗体   |
| 描述    | 兔多克隆抗体 to Topoisomerase I   |
| 宿主    | Rabbit  |
| 经测试应用 | 适用于: ICC/IF, WB, IP   |
| 种属反应性 | 与反应: Mouse, Rat, Human<br>预测可用于: Chicken, Hamster, Cow, Monkey   |
| 免疫原   | Synthetic peptide corresponding to Human Topoisomerase I aa 1-100 (N terminal) conjugated to keyhole limpet haemocyanin.<br>(Peptide available as <a href="#">ab94391</a> )   |
| 常规说明  | <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p> |

### 性能

|      |  |
|------|--|
| 形式   | Liquid   |
| 存放说明 | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.   |
| 存储溶液 | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituent: PBS   |
| 纯度   | Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help. |
| 克隆   | Immunogen affinity purified<br>多克隆   |

## 应用

**The Abpromise guarantee** **Abpromise™**承诺保证使用ab85038于以下的经测试应用

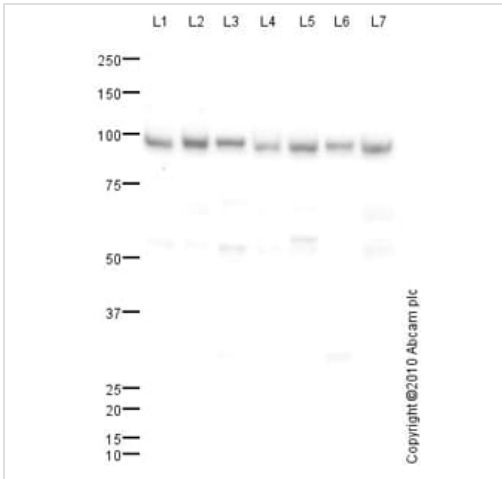
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用     | Ab评论      | 说明   |
|--------|-----------|--|
| ICC/IF | ★★★★☆ (1) | Use a concentration of 1 µg/ml.  |
| WB     | ★★★★★ (1) | Use a concentration of 1 µg/ml. Detects a band of approximately 90 kDa (predicted molecular weight: 90 kDa). |
| IP     | ★★★★★ (1) | Use a concentration of 5 µg/ml.  |

## 靶标

|       |   |
|-------|---|
| 功能    | The reaction catalyzed by topoisomerases leads to the conversion of one topological isomer of DNA to another.   |
| 疾病相关  | Note=A chromosomal aberration involving TOP1 is found in a form of therapy-related myelodysplastic syndrome. Translocation t(11;20)(p15;q11) with NUP98.  |
| 序列相似性 | Belongs to the eukaryotic type I topoisomerase family.  |
| 翻译后修饰 | 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.                       |
| 细胞定位  | Nucleus > nucleolus. Nucleus > nucleoplasm. Diffuse nuclear localization with some enrichment in nucleoli. On CPT treatment, cleared from nucleoli into nucleoplasm. Sumolyated forms found in both nucleoplasm and nucleoli. |

## 图片



Western blot - Anti-Topoisomerase I antibody (ab85038)

**All lanes :** Anti-Topoisomerase I antibody (ab85038) at 1 µg/ml

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

**Lane 3 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 4 :** HEK293 (Human embryonic kidney cell line) Whole Cell Lysate

**Lane 5 :** MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

**Lane 6 :** Caco 2 (Human colonic carcinoma cell line) Whole Cell Lysate

**Lane 7 :** SHSY-5Y (Human neuroblastoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 90 kDa

**Observed band size:** 90 kDa

**Exposure time:** 30 seconds

Human DNA topoisomerase 1 contains a potential sumoylation site (SwissProt) which may explain its migration at a higher molecular weight than predicted.



Western blot - Anti-Topoisomerase I antibody (ab85038)

**All lanes :** Anti-Topoisomerase I antibody (ab85038) at 1 µg/ml

**Lane 1 :** NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

**Lane 2 :** PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

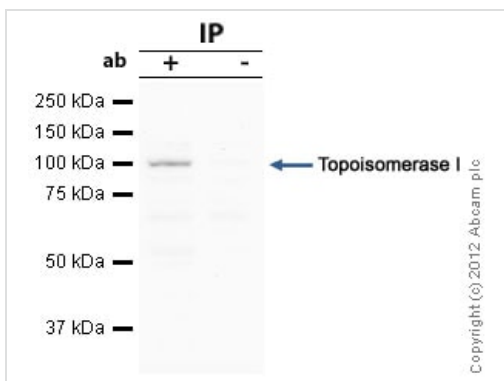
Performed under reducing conditions.

**Predicted band size:** 90 kDa

**Observed band size:** 100 kDa

**Additional bands at:** 50 kDa, 55 kDa, 70 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 3 minutes



Immunoprecipitation - Anti-Topoisomerase I antibody (ab85038)

Topoisomerase I was immunoprecipitated using 0.5mg Hek293 whole cell extract, 5µg of Rabbit polyclonal to Topoisomerase I and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

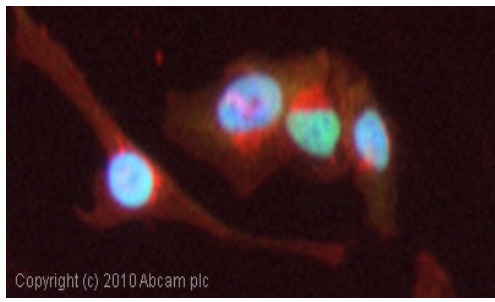
The antibody was incubated under agitation with Protein G beads for 10min, Hek293 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab85038.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to

Rabbit IgG light chain (HRP) ([ab99697](#)).

Band: 90kDa; Topoisomerase I



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Immunocytochemistry/ Immunofluorescence - Anti-  
Topoisomerase I antibody (ab85038)

ICC/IF image of ab85038 stained HeLa cells. The cells were 4% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab85038, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM. This antibody also gave a positive result in 4% PFA fixed (10 min) Hek293, HepG2 and MCF7 cells at 1µg/ml, and in 100% methnaol fixed (5 min) HeLa cells at 1µg/ml.

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