abcam

Product datasheet

Anti-Topoisomerase I antibody ab85038

★★★★★ 4 Abreviews 7 References 画像数 4

製品の概要

製品名 Anti-Topoisomerase I antibody

製品の詳細 Rabbit polyclonal to Topoisomerase I

由来種 Rabbit

アプリケーション 適用あり: ICC/IF, WB, IP

種交差性 交差種: Mouse, Rat, Human

交差が予測される動物種: Chicken, Hamster, Cow, Monkey 🔷

免疫原 Synthetic peptide corresponding to Human Topoisomerase I aa 1-100 (N terminal) conjugated to

keyhole limpet haemocyanin. (Peptide available as <u>ab94391</u>)

特記事項

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.

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&As

製品の特性

製品の状態 Liquid

保存方法 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.

バッファー pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

scientific support team who will be happy to help.

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

1

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab85038の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF	★★★★ ☆ <u>(1)</u>	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.

ターゲット情報

機能 The reaction catalyzed by topoisomerases leads to the conversion of on	ne topological isomer of
---	--------------------------

DNA to another.

関連疾患 Note=A chromosomal aberration involving TOP1 is found in a form of therapy-related

myelodysplastic syndrome. Translocation t(11;20)(p15;q11) with NUP98.

配列類似性 Belongs to the eukaryotic type I topoisomerase family.

翻訳後修飾 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

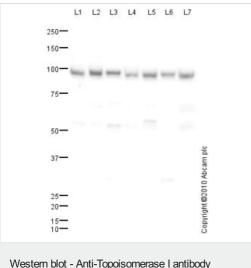
(CPT) treatment.

細胞内局在 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.

画像



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 lgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

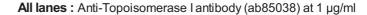
Predicted band size: 90 kDa Observed band size: 90 kDa

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)



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.

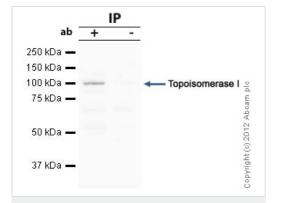
Performed under reducing conditions.

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 (-).

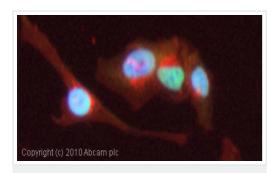
The antibody was incubated under agitation with Protein G beads for 10min, Hek293 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

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 lgG light chain (HRP) (ab99697).

Band: 90kDa; Topoisomerase I



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, 1 μ g/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit lgG (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 1.43 μ M. This antibody also gave a positive result in 4% PFA fixed (10 min) Hek293, HepG2 and MCF7 cells at 1 μ g/ml, and in 100% methnaol fixed (5 min) HeLa cells at 1 μ g/ml.

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors