abcam

Product datasheet

Anti-Topoisomerase II beta/TOP2B antibody ab125297



2 References 画像数 3

製品の概要

製品名 Anti-Topoisomerase II beta/TOP2B antibody

製品の詳細 Rabbit polyclonal to Topoisomerase II beta/TOP2B

由来種 Rabbit

アプリケーション **適用あり**: WB

種交差性 交差種: Mouse, Human

交差が予測される動物種: Rat, Cow, Dog, Pig, Chimpanzee, Macaque monkey, Gorilla,

Orangutan 4

免疫原 Synthetic peptide corresponding to Human Topoisomerase II beta/TOP2B aa 1-100 conjugated

to keyhole limpet haemocyanin. (Peptide available as <u>ab156303</u>)

ポジティブ・コントロール WB: Wild-type NALM-6 cell lysate. HeLa and NIH/3T3 whole cell lysate. Jurkat, K562, MCF7 and

HepG2 cell lysate.

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

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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.

精製度 Immunogen affinity purified

ポリ/モノ ポリクローナル

アイソタイプ IgG

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ab125297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
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 183 kDa (predicted molecular weight: 183 kDa). Abcam recommends using milk as the blocking agent - 5%

ターゲット情報

機能 Control of topological states of DNA by transient breakage and subsequent rejoining of DNA

strands. Topoisomerase II makes double-strand breaks. Indirectly ivolved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-

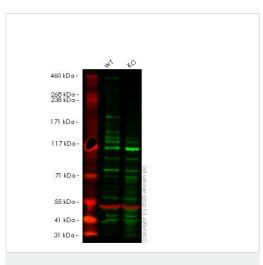
mediated transrepression of the CYP27B1 gene.

配列類似性 Belongs to the type II topoisomerase family.

翻訳後修飾 Phosphorylated upon DNA damage, probably by ATM or ATR.

細胞内局在 Cytoplasm. Nucleus > nucleolus.

画像



Western blot - Anti-Topoisomerase II beta/TOP2B antibody (ab125297)

All lanes : Anti-Topoisomerase II beta/TOP2B antibody (ab125297)

Lane 1: Wild-type HEK-293T cell lysate

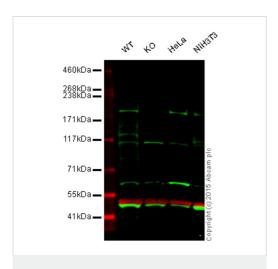
Lane 2: TOP2B knockout HEK-293T cell lysate

Lysates/proteins at 40 µg per lane.

Performed under reducing conditions.

Predicted band size: 183 kDa **Observed band size:** 183 kDa **Lanes 1-2:** Merged signal (red and green). Green - ab125297 observed at 183 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) observed at 50 kDa.

ab125297 was shown to react with Topoisomerase II beta/TOP2B in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line ab266340 (knockout cell lysate ab257286) was used. Wild-type HEK-293T and TOP2B knockout HEK-293T cell lysates were subjected to SDS-PAGE. ab125297 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) overnight at 4°C at a 1 µg/ml and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Topoisomerase II beta/TOP2B antibody (ab125297)

Lane 1: Wild-type NALM-6 cell lysate (20 µg)

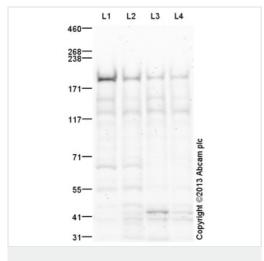
Lane 2: Topoisomerase II beta/TOP2B knockout NALM-6 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: NIH/3T3 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab125297 observed at 200 kDa. Red - loading control, **ab7291**, observed at 50 kDa.

ab125297 was shown to recognize Topoisomerase II beta/TOP2B when Topoisomerase II beta/TOP2B knockout samples were used, along with additional cross-reactive bands. Wild-type and Topoisomerase II beta/TOP2B knockout samples were subjected to SDS-PAGE. ab125297 and ab7291 (loading control to alpha tubulin) were diluted 1 µg/mL and 1/2000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-Topoisomerase II beta/TOP2B antibody (ab125297)

All lanes : Anti-Topoisomerase II beta/TOP2B antibody (ab125297) at 1 µg/ml (Milk blocking - 5%)

Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

Lane 2: K562 (Human erythromyeloblastoid leukemia cell line) Whole Cell Lysate

Lane 3: MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate

Lane 4 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 25 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 183 kDa **Observed band size:** 183 kDa

Additional bands at: 120 kDa, 150 kDa, 42 kDa, 55 kDa, 66 kDa.

We are unsure as to the identity of these extra bands.

Exposure time: 8 minutes

Abcam recommends using milk as the blocking agent - 5%. This blot was produced using a 3-8% Tris Acetate gel under the TA buffer system. The gel was run at 150V for 60 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 5% Milk before being incubated with ab125297 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and

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