abcam

Product datasheet

Anti-Topoisomerase II alpha antibody [EP1102Y] ab52934



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Overview

Product name Anti-Topoisomerase II alpha antibody [EP1102Y]

Description Rabbit monoclonal [EP1102Y] to Topoisomerase II alpha

Host species Rabbit

Specificity Please be aware that the antibody provided positive results in cell lysate samples but negative

results in some tissue lysate samples.

Tested applications Suitable for: WB, IHC-P

Unsuitable for: Flow Cyt or ICC/IF

Species reactivity Reacts with: Mouse, Rat, Human

Immunogen Synthetic peptide within Human Topoisomerase II alpha aa 1500-1600 (C terminal). The exact

sequence is proprietary. Database link: **P11388**

Positive control HeLa whole cell lysate (ab150035); human breast carcinoma tissue. WB: HeLa, Jurkat, Neuro-2a

and PC-12 whole cell lysate; Human breast cancer, Mouse thymus lysate, Rat thymus lysate and

Rat testis lysate

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

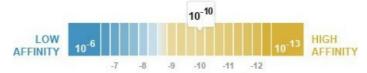
Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

Dissociation constant (K_D)

 $K_D = 5.39 \times 10^{-10} M$



Learn more about K_D

Storage buffer

pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

Purity

Protein A purified

Clonality

Monoclonal

Clone number

EP1102Y

Isotype

ΙgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab52934 in the following tested applications.

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

Application	Abreviews	Notes
WB		1/10000. Detects a band of approximately 174 kDa (predicted molecular weight: 174 kDa).
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Application notes

Is unsuitable for Flow Cyt or ICC/IF.

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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.

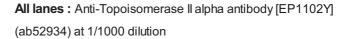
Cellular localization

Cytoplasm. Nucleus > nucleoplasm. Generally located in the nucleoplasm.

Images



Western blot - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)



Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate prepared in RIPA lysis method

Lane 2: HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate prepared in 1%SDS Hot lysis method 20µg

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

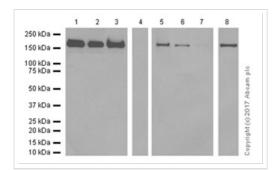
Predicted band size: 174 kDa

Exposure time: 7 seconds

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

All lysate were prepared using 1%SDS Hot lysis method.

We recommend to use 1%SDS Hot lysis prepare method to get desired Western Blot results.



Western blot - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)

All lanes : Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934) at 1/1000 dilution

Lane 1: HeLa (human cervix adenocarcinoma) whole cell lysate

Lane 2: Jurkat (human acute T cell leukemia) whole cell lysate

Lane 3: Neuro-2a (mouse neuroblastoma) whole cell lysate

Lane 4: Human breast cancer lysate

Lane 5: Mouse thymus lysate

Lane 6 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

Lane 7: Rat thymus lysate

Lane 8: Rat testis lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/50000

dilution

Predicted band size: 174 kDa **Observed band size:** 174 kDa

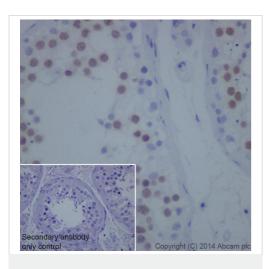
Exposure time:

Lanes 1-3: 1 second.

Lanes 4-7: 3 minutes.

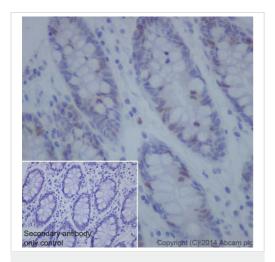
Lane 8: 7 seconds.

Blocking and dilution buffer: 5% NFDM/TBST.



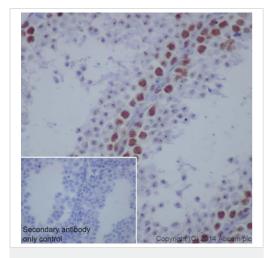
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human testis tissue labelling Topoisomerase II alpha with ab52934 at a dilution of 1/8000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



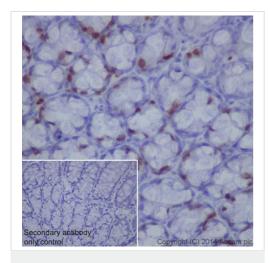
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human colon tissue labelling Topoisomerase II alpha with ab52934 at a dilution of 1/8000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



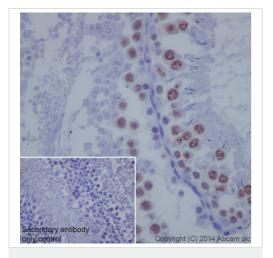
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse testis tissue labelling Topoisomerase II alpha with ab52934 at a dilution of 1/8000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



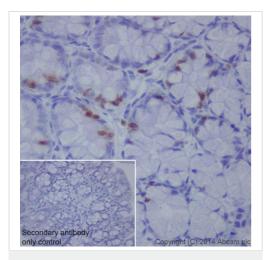
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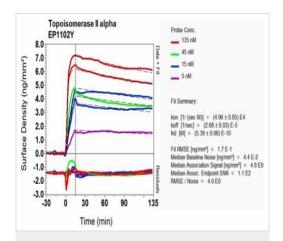
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat testis tissue labelling Topoisomerase II alpha with ab52934 at a dilution of 1/8000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat colon tissue labelling Topoisomerase II alpha with ab52934 at a dilution of 1/8000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Ol-RD Scanning - Anti-Topoisomerase II alpha antibody [EP1102Y] (ab52934)

Equilibrium disassociation constant (K_D) Learn more about K_D

Click here to learn more about KD



(ab52934)

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