

### Anti-Topoisomerase I antibody [EPR5375] ab109374

リコンビナント **RabMAb**

★★★★☆ **8 Abreviews** **36 References** 画像数 **13**

#### 製品の概要

製品名	Anti-Topoisomerase I antibody [EPR5375]
製品の詳細	Rabbit monoclonal [EPR5375] to Topoisomerase I
由来種	Rabbit
アプリケーション	<b>適用あり:</b> Flow Cyt (Intra), WB, IHC-P, ICC/IF <b>適用なし:</b> IP
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB; Jurkat, SW480, MCF7, HepG2, Neuro-2a, PC-12, and K562 cell lysates; IHC-P: Human breast carcinoma, Human colonic carcinoma tissues, Human clear cell carcinoma of kidney and Mouse kidney, and Rat colon tissue; ICC/IF: MCF7 cells;
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 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. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR5375

アプリケーション

**The Abpromise guarantee**      Abpromise保証は、次のテスト済みアプリケーションにおけるab109374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。

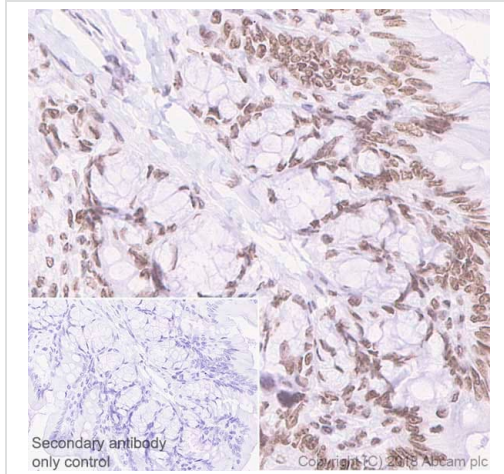
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/10 - 1/100. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (5)	1/10000 - 1/50000. Predicted molecular weight: 91 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .
ICC/IF	★★★★☆ (1)	1/500. <b>For unpurified use at 1/100 - 1/250</b>

**追加情報**      Is unsuitable for IP.

ターゲット情報

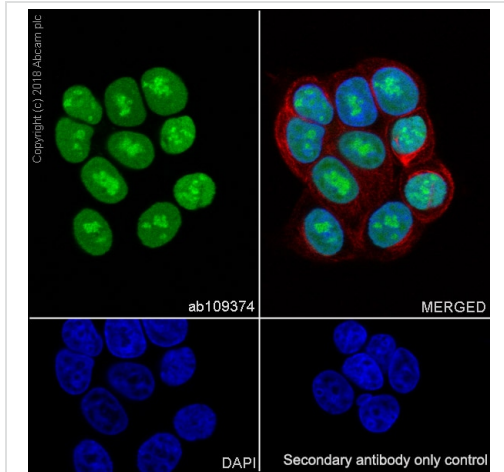
機能	The reaction catalyzed by topoisomerases leads to the conversion of one topological isomer of DNA to another.
関連疾患	Note=A chromosomal aberration involving TOP1 is found in a form of therapy-related myelodysplastic syndrome. Translocation t(11;20)(p15;q11) with NUP98.
配列類似性	Belongs to the eukaryotic 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



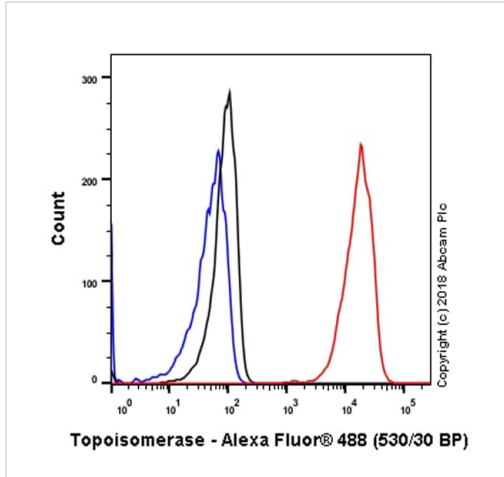
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat colon tissue sections labeling Topoisomerase I with purified ab109374 at 1:100 dilution (1.29 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



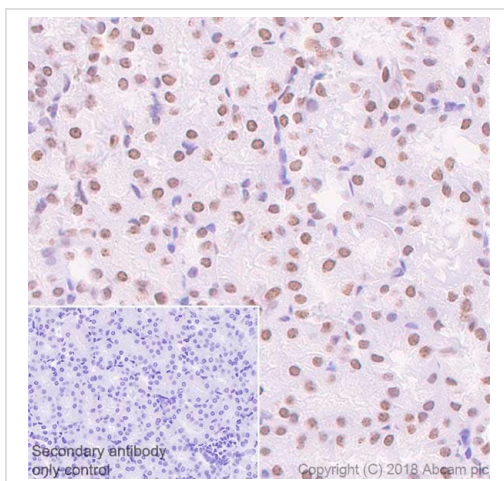
Immunocytochemistry/ Immunofluorescence - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Topoisomerase I with Purified ab109374 at 1/500 dilution (0.3 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



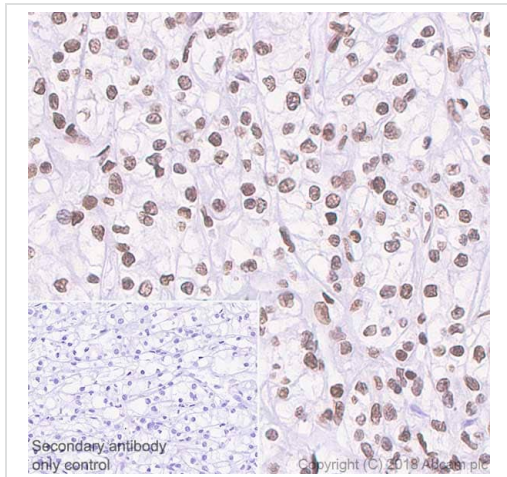
Flow Cytometry (Intracellular) - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

Intracellular Flow Cytometry analysis of HepG2 (Human hepatocellular carcinoma epithelial cell) cells labeling Topoisomerase I with Purified ab109374 at 1/20 dilution (10µg/ml) (red). Cells were fixed with 80% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



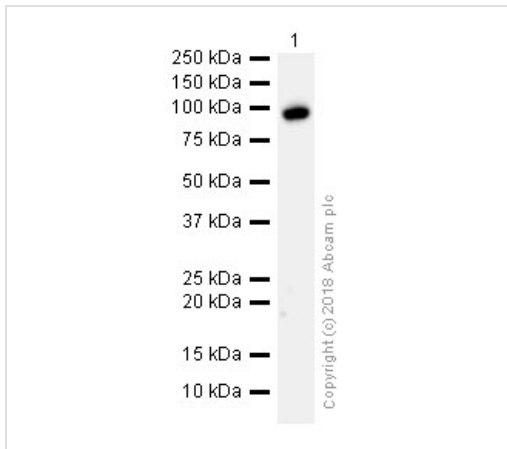
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse kidney tissue sections labeling Topoisomerase I with purified ab109374 at 1:100 dilution (1.29 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human clear cell carcinoma of kidney tissue sections labeling Topoisomerase I with Purified ab109374 at 1:100 dilution (1.29 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

Anti-Topoisomerase I antibody [EPR5375] (ab109374) at 1/50000 dilution (Purified) + PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates at 20 µg

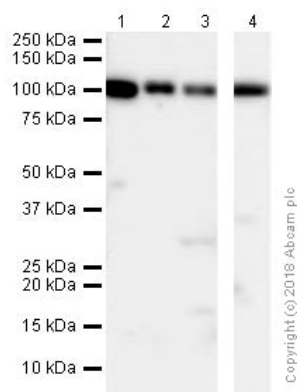
### Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 91 kDa

**Observed band size:** 91 kDa

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



Western blot - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

**All lanes :** Anti-Topoisomerase I antibody [EPR5375] (ab109374) at 1/10000 dilution (Purified)

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** Jurkat (Human T cell leukemia T lymphocyte) whole cell lysates

**Lane 3 :** HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysates

**Lane 4 :** Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysates

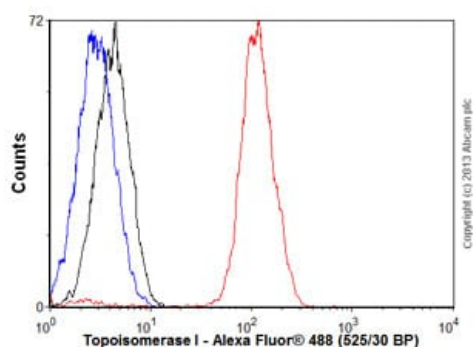
Lysates/proteins at 20 µg per lane.

## Secondary

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

**Predicted band size:** 91 kDa

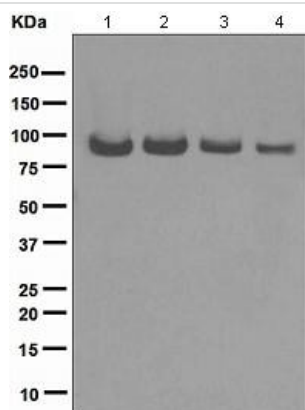
**Observed band size:** 91 kDa



Flow Cytometry (Intracellular) - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

Overlay histogram showing HepG2 cells stained with ab109374 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab109374, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.





Western blot - Anti-Topoisomerase I antibody  
[EPR5375] (ab109374)

**All lanes :** Anti-Topoisomerase I antibody [EPR5375] (ab109374)  
at 1/10000 dilution

**Lane 1 :** Jurkat cell lysate

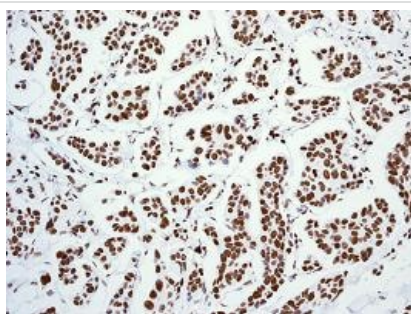
**Lane 2 :** MCF7 cell lysate

**Lane 3 :** SW480 cell lysate

**Lane 4 :** K562 cell lysate

Lysates/proteins at 10 µg per lane.

**Predicted band size:** 91 kDa



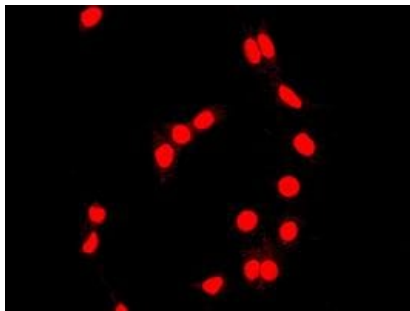
Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-Topoisomerase I antibody  
[EPR5375] (ab109374)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue using ab109374 at a dilution of 1/100. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-Topoisomerase I antibody  
[EPR5375] (ab109374)

Immunohistochemical analysis of paraffin-embedded Human colonic carcinoma tissue using ab109374 at a dilution of 1/100. Heat mediated antigen retrieval was performed before commencing with IHC staining protocol.



Immunofluorescent staining of MCF7 cells using ab109374 at a dilution of 1/100.

Immunocytochemistry/ Immunofluorescence - Anti-Topoisomerase I antibody [EPR5375] (ab109374)

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Topoisomerase I antibody [EPR5375]  
(ab109374)

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

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