

A4389

Leader in Biomolecular Solutions for Life Science



DNA topoisomerase II alpha (TOP2A) Rabbit mAb

Catalog No.: A4389

Recombinant

Basic Information

Observed MW

174kDa

Calculated MW

174kDa/178kDa/179kDa/183kDa

Category

Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA,IF-P

Cross-Reactivity

Human,Mouse,Rat

CloneNo number

ARC0994

Background

This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic states of DNA during transcription. This nuclear enzyme is involved in processes such as chromosome condensation, chromatid separation, and the relief of torsional stress that occurs during DNA transcription and replication. It catalyzes the transient breaking and rejoining of two strands of duplex DNA which allows the strands to pass through one another, thus altering the topology of DNA. Two forms of this enzyme exist as likely products of a gene duplication event. The gene encoding this form, alpha, is localized to chromosome 17 and the beta gene is localized to chromosome 3. The gene encoding this enzyme functions as the target for several anticancer agents and a variety of mutations in this gene have been associated with the development of drug resistance. Reduced activity of this enzyme may also play a role in ataxia-telangiectasia.

Recommended Dilutions

| | |
|--------|---|
| WB | 1:1000 - 1:6000 |
| IF/ICC | 1:200 - 1:1200 |
| IF-P | 1:200 - 1:1200 |
| IHC-P | 1:300 - 1:1200 |
| ELISA | Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. |

Contact

www.abclonal.com

Immunogen Information

Gene ID

7153

Swiss Prot

P11388

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

TOP2; TP2A; TOPIIA; TOP2alpha; DNA topoisomerase II alpha (TOP2A)

Product Information

Source

Rabbit

Isotype

IgG

Purification

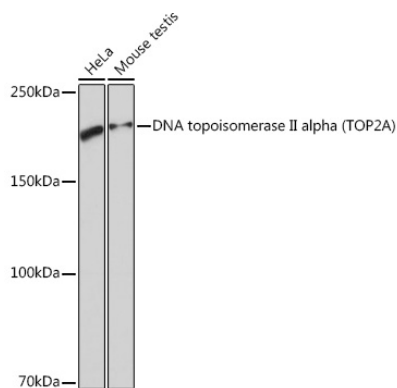
Affinity purification

Storage

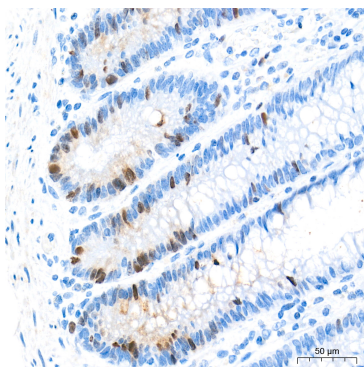
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

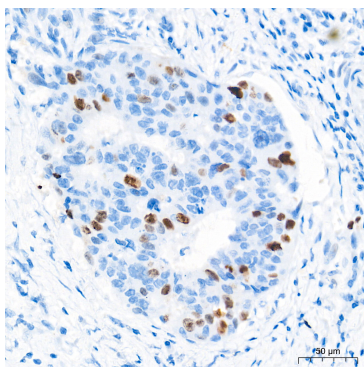
Validation Data



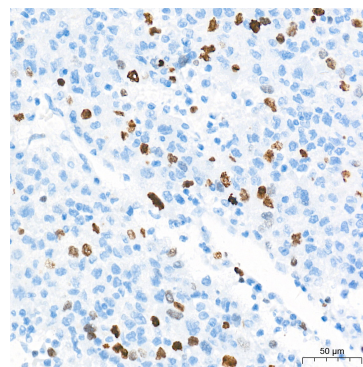
Western blot analysis of various lysates using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at 1:1000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 3s.



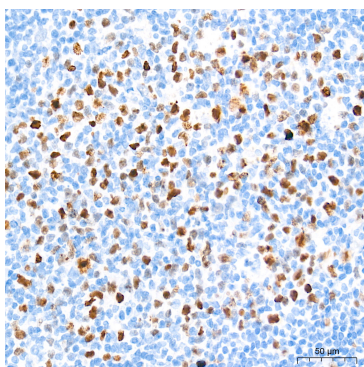
Immunohistochemistry analysis of paraffin-embedded Human colon tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



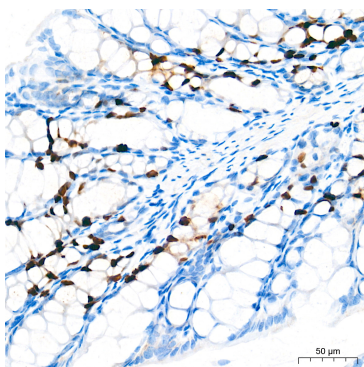
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



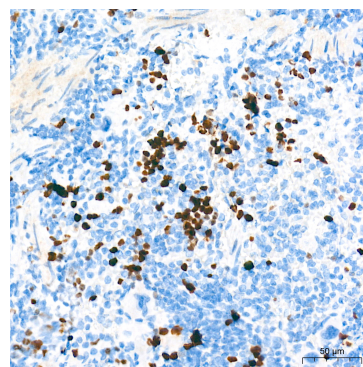
Immunohistochemistry analysis of paraffin-embedded Human liver cancer tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



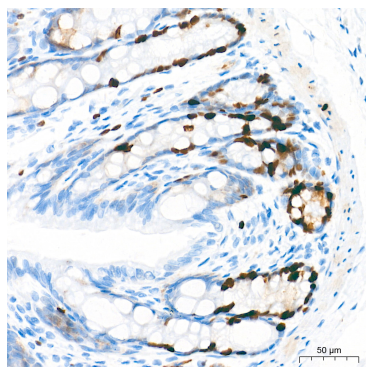
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



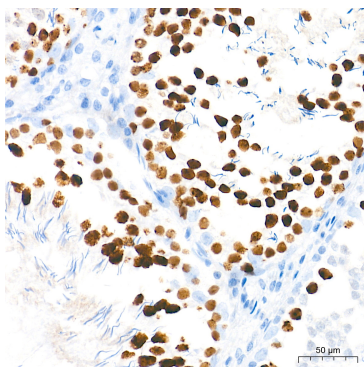
Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



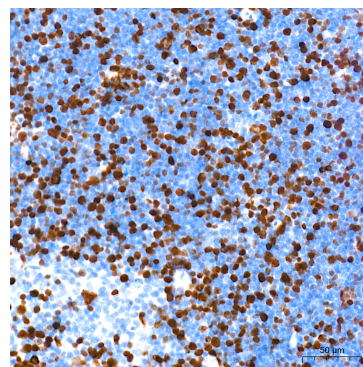
Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



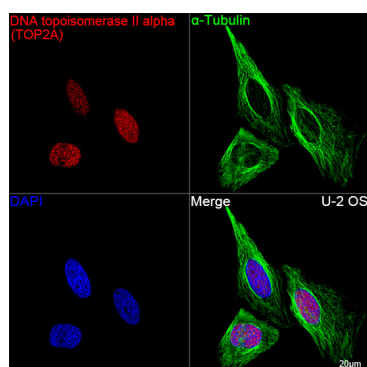
Immunohistochemistry analysis of paraffin-embedded Rat colon tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



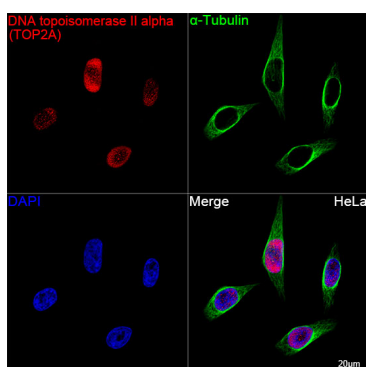
Immunohistochemistry analysis of paraffin-embedded Rat testis tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



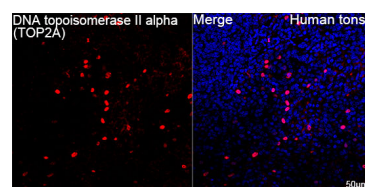
Immunohistochemistry analysis of paraffin-embedded Rat thymus tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389) at a dilution of 1:800 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



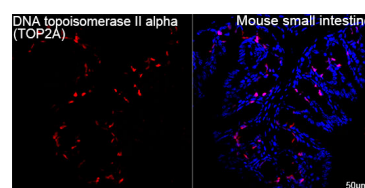
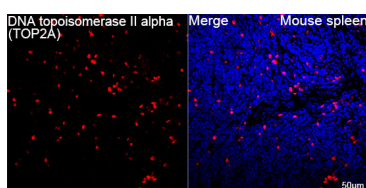
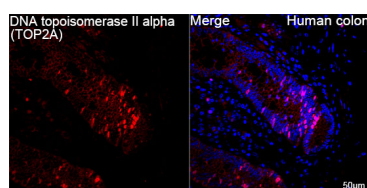
Confocal imaging of U-2 OS cells using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of HeLa cells using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α -Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

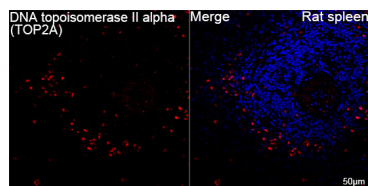


Confocal imaging of paraffin-embedded Human tonsil tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

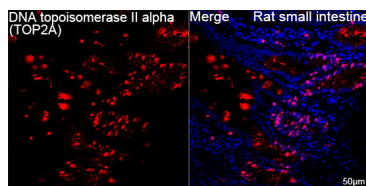


Validation Data

Confocal imaging of Human colon cells using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



Confocal imaging of paraffin-embedded Mouse spleen tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Confocal imaging of paraffin-embedded Mouse small intestine tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

Confocal imaging of paraffin-embedded Rat spleen tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

Confocal imaging of paraffin-embedded Rat small intestine tissue using DNA topoisomerase II alpha (TOP2A) Rabbit mAb (A4389, dilution 1:400) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). High pressure antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.