

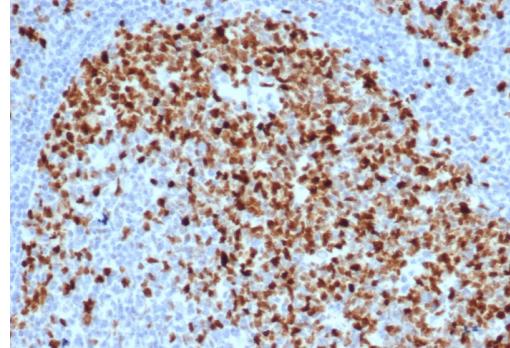
## Topoisomerase II alpha (Proliferation & Drug-Resistance Marker)

Recombinant Rabbit Monoclonal Antibody [Clone TOP2A/6570R]

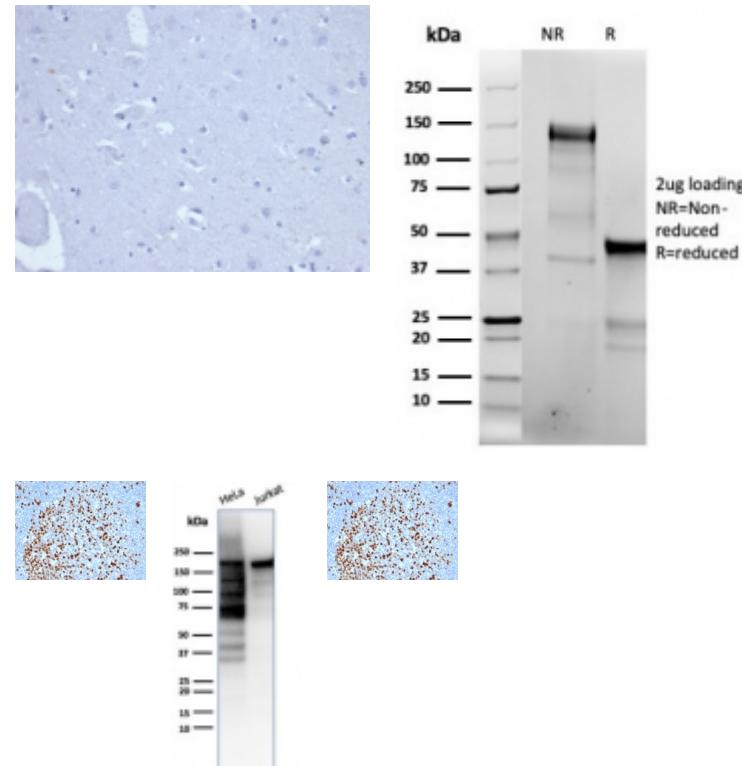
| Catalog No      | Format  | Size   | Price (USD) |
|-----------------|---|--------|-------------|
| 7153-RBM5-P0    | Purified Ab with BSA and Azide at 200ug/ml    | 20 ug  | 219.00      |
| 7153-RBM5-P1    | Purified Ab with BSA and Azide at 200ug/ml    | 100 ug | 499.00      |
| 7153-RBM5-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug | 499.00      |

|                           |  |
|---------------------------|--|
| Human Entrez Gene ID      | 7153   |
| Human SwissProt           | P11388   |
| Human Unigene             | 156346   |
| Human Gene Symbol         | TOP2A  |
| Human Chromosome Location | 17q21.2  |
| Synonyms                  | ATP hydrolyzing DNA topoisomerase II alfa; DNA gyrase; DNA topoisomerase (ATP hydrolyzing); DNA topoisomerase 2 alpha; DNA topoisomerase II 170kD; DNA topoisomerase II alpha; Topoisomerase DNA II alpha 170kDa; TP2A |

|                        |   |
|------------------------|---|
| Immunogen              | Recombinant human Topoisomerase II alpha fragment (aa1352-1493) (exact sequence is proprietary) |
| Host / Ig Isotype      | Rabbit / IgG  |
| Mol. Weight of Antigen | 170kDa  |
| Cellular Localization  | Nuclear   |
| Species Reactivity     | Human.  |
| Positive Control       | HeLa or Jurkat cells. Human tonsil or esophagus.  |



Formalin-fixed, paraffin-embedded human tonsil stained with Topo IIa Recombinant Rabbit Monoclonal Antibody (TOP2A/6570R).



## Specificity & Comments

The topoisomerase II- $\beta$  isoform is a 170kDa nuclear protein and plays an important role in DNA synthesis and RNA transcription, as well as chromosomal segregation during mitosis. Topoisomerase II- $\beta$  is reported to be a sensitive and specific marker of late S-, G2- & M-phases in transformed and developmentally regulated normal cells, and has been shown to be over-expressed in many human cancers. Decreased expression of Topoisomerase II- $\beta$  is the predominant mechanism of resistance to several chemotherapeutic agents.

## Known Applications & Suggested Dilutions

### Western Blot (2-4ug/ml)

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)  
(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 &degC followed by cooling at RT for 20 minutes)  
Optimal dilution for a specific application should be determined.

## Key References

1. Lynch BJ, et al. Hum. Pathol. 1997 Oct;28(10):1180-8
2. Gupta D, et al. Appl. Immunohistochem. Mol. Morphol. 2001 Sep;9(3):215-21.

## Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

## Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

## Limitations

This antibody is available for research use only and is not approved for use in diagnosis.

## Warranty

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.