

Polyclonal Antibody to Human Topo IIb



□ **Catalog No. 2010-3 250 units**



Description:

There are at least two type II topoisomerases in animal cells: Topo II α and Topo II β (Chung et al., 1989; Tan et al., 1992). The former is a cell cycle regulated enzyme of 170 kDa and the latter is not related to cell cycle phase and is slightly larger (180 kDa). This rabbit polyclonal antibody is directed specifically against the C-terminus of purified topo II β .

This reagent works with the following:

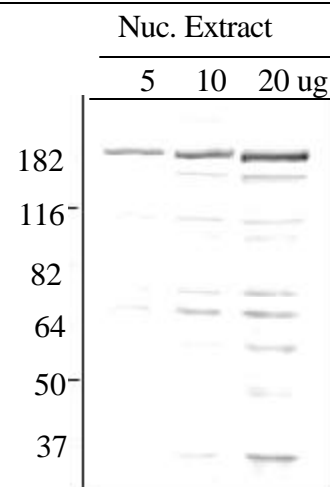
1. *Immunohistochemistry: Typical working dilution of 1:20 to 1:40 using a high temperature unmasking technique (see Web site for details at www.topogen.com or go directly to http://www.topogen.com/html/unmasking_method.html). Typically, 60 min of primary AB incubation should be performed at room temperature. All other procedures for detection (secondary antibody, substrates, fluorescent detection) are standard but should be worked out empirically for your specific system.
2. Western blotting: The antibody concentration is provided in "western blotting units" where 1 unit corresponds to a 1:1000 dilution of antibody to make a working solution of probe. This antibody is supplied at 2.5 unit/ul; thus, 1 ul of the AB should be diluted to 2.5 ml to make a final working solution for probing of a Western blot.

Vial contents: The vial contains either 25 units (Cat #2010-3A) or 250 units (Cat #2010-3) of crude serum containing antibody to topo II β . The antibody is stable for 1-2 months at 4°C. For long term storage, the AB should be aliquoted and stored at -20°C. Repeated freezing/thawing must be avoided. Prepare working stocks of the reagent on the day of use. The AB is in the form of rabbit serum.

References:

- Austin, C.A., and Marsh, K. Eukaryotic Topoisomerase II β . *Bioessays* 20:215-226 (1998).
- *Baumann et al., Differential immunohistochemical staining of DNA topo II a and f3 in human tissues and for topo II 13 in non-Hodgkin's lymphomas. *Mod. Pathol.* 10:168-175 (1997).
- Turley et al., Distribution and expression of different isoforms of DNA topo II in normal and neoplastic human tissues. *British Journal of Cancer* 75: 1340-1346 (1997)
- Negri et al., DNA topo II 13: stability and distribution in different animal cells in comparison to topo I and topo IIa. *Experimental Cancer Res.* 206:128-133 (1992)

Nuclear extracts were prepared from HeLa cells (0.5M NaCl extraction of isolated nuclei) followed by centrifugation (13,000 g for 15 min in cold). The gels were loaded with indicated amounts of protein and the blot probed with primary AB diluted 1:2500. Crude rabbit serum was used in this analysis (Lot #05NV10)



Product Application and Disclaimer

This product is not licensed or approved for administration to humans or animals. It may be used with experimental animals only. The product is for in vitro research diagnostic studies only. The product is non-infectious and non-hazardous to human health. This information is based on present knowledge and does not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship. TopoGEN, Inc. shall not be held liable for product failure due to mishandling and incorrect storage by end user. TopoGEN's liability is limited to credit or product replacement.



TopoGEN, Inc.

For orders: www.topogen.com

For Technical Questions: 614.451.5810

or support@topogen.com

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