

# [pThr1342]DNA-topoisomerase II $\alpha$ monoclonal antibody (3D4)

DNA-topoisomerase II, also known as Topo II or Top 2, is a multifunctional nuclear enzyme required during DNA replication, chromosome disjunction at mitosis, and other DNA-related activities because of its ability to alter DNA supercoiling. In mammalian cells, Topo II consists of two isozymes, Topo II-alpha (170kDa) and Topo II-beta (180kDa) and expression and localization of each isoform are distinct and stage specific during the cell cycle. Topo II-beta is expressed constitutively throughout the cell cycle, whereas the expression of Topo II-alpha is cell cycle-regulated, peaking in G2 to M phase and declining to a minimal level at the end of M phase. DNA-topoisomerase II is the target of some of the most active drugs used in chemotherapy and has been shown to have a critical role in neural development.

This antibody is covered by our [Worry-Free Guarantee](#).

## Ordering Information

[Order Online »](#)

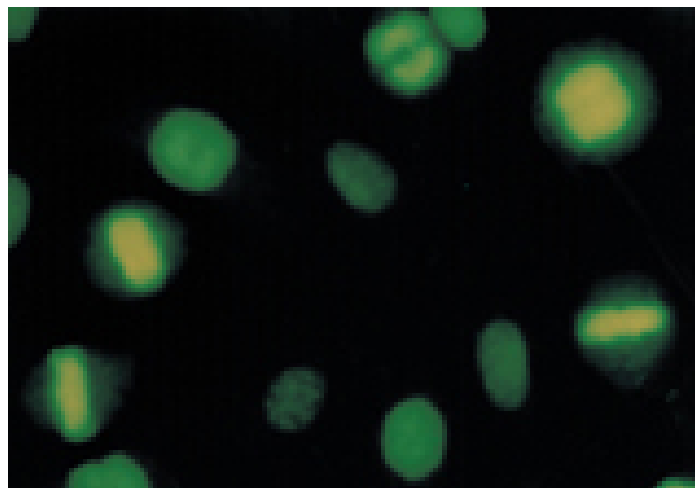
ADI-KAM-CC220-E	100µg
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## Manuals, SDS & CofA

[View Online »](#)



Western blot analysis of Jurkat cells using DNA-Topoisomerase IIα (pThr1342) mAb (3D4).



Immunocytochemistry analysis of human HEP-2 cells stained with DNA-Topoisomerase IIα (pThr1342) mAb (3D4).

## Handling & Storage

Long Term Storage      -20°C

Shipping      Blue Ice

## Regulatory Status

RUO - Research Use Only

## Product Details

Application      ICC, WB

Application Notes      Detects a band of ~170kDa by Western blot.

Clone      3D4

Formulation      Liquid. In PBS, pH 7.2, containing 50% glycerol.

Host      Mouse

Immunogen      Synthetic peptide corresponding to a portion of human Topoisomerase II $\alpha$  phosphorylated at Tyr1342.

Isotype      IgG1

Purity Detail      Protein A affinity purified.

Recommendation Dilutions/Conditions      Immunocytochemistry (10 $\mu$ g/ml)Western Blot (1-10 $\mu$ g/ml, colorimetric)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.

Species Reactivity      Human

UniProt ID      P11388 ( $\alpha$  isozyme), Q02880 ( $\beta$  isozyme)

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