

10-7577: Monoclonal antibody to Topo II alpha (Clone: ABM48B4)

Clonality :	Monoclonal
Clone Name :	ABM48B4
Application :	FACS,WB
Reactivity :	Human
Gene :	TOP2A
Gene ID :	7153
Uniprot ID :	P11388
Format :	Purified
Alternative Name :	TOP2A,TOP2
Isotype :	Mouse IgG2b Kappa
Immunogen Information :	A partial length recombinant human Topo II alpha protein (amino acids 1326-1512) was used as the immunogen for this antibody.

Description

Topoisomerases are essential nuclear enzymes that are involved in DNA supercoiling regulation and play key roles in transcription, replication, and chromosome segregation. Two major classes of topoisomerases (types I and II) are distinguished by the number of DNA strands that they cleave and the mechanism by which they alter the topological properties of DNA. Topo II Alpha is cell cycle-regulated and is essential for the survival of proliferating cells. It accumulates on chromatin during M-phase, a dynamic localization that is dependent on its C-terminal domain. Although Topo II alpha is the major form of Topo II responsible for decatenation, mitotic chromosome formation and chromosome segregation in proliferating cells, the contribution of the two isoforms has not yet been fully established. Topo II Alpha plays an important role in DNA synthesis and transcription and has been implicated in a variety of human cancers. It also plays a role in various cancer subtypes and acts as targets for cancer therapy, as well as biomarkers for prediction of response.

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Western blot analysis: 1-2 µg/ml;FACS Analysis: 0.5-1 µg/10⁶ cells

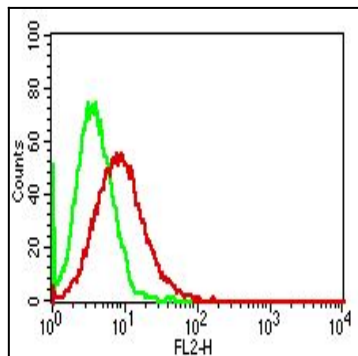


Fig:1- Intracellular Flow analysis of Topo II alpha antibody in Jurkat cells using 0.5 $\mu\text{g}/10^6$ cells of anti-Topo II alpha antibody (ABM48B4). Green represents isotype control; red represents anti-Topo II alpha antibody. Goat anti-mouse PE conjugate was used as secondary antibody.

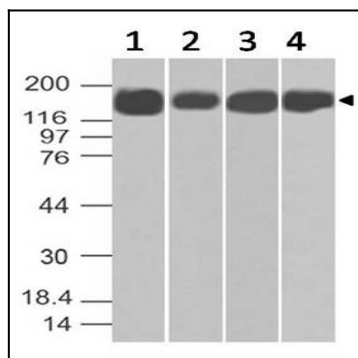


Fig:2- Expression analysis of Topo II alpha. Anti-Topo II alpha antibody (Clone: ABM48B4) was tested at 1 $\mu\text{g}/\text{ml}$ on (1) HT-29, (2) 293, (3) A549 and (4) Raji Lysates.