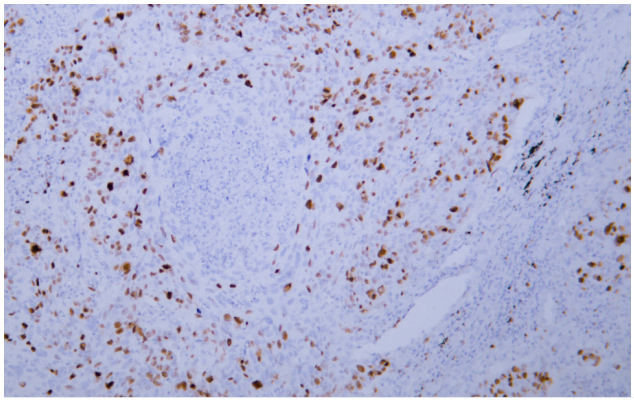
Topoisomerase IIα mouse mAb(ABT272)

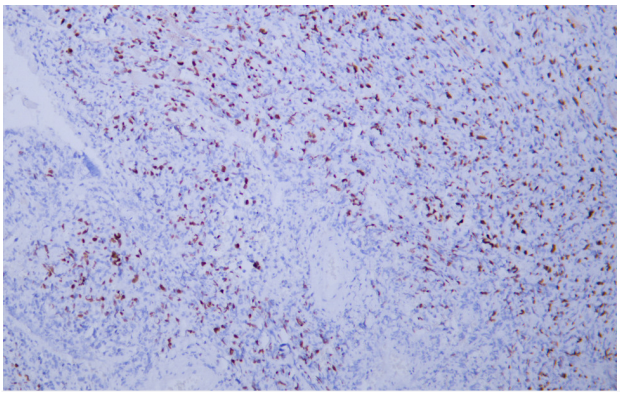
Catalog No	BYab-31315
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	IHC;WB;IF
Gene Name	TOP2A TOP2
Protein Name	Topoisomerase IIα
Immunogen	Synthesized peptide derived from human Topoisomerase IIα
Specificity	The antibody can specifically recognize human Topoisomerase IIα protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.82% sodium azide.
Source	Mouse, Monoclonal/IgG1, Kappa
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IHC-p 1:100-500, WB 1:200-1000, IF 1:100-500
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	DNA topoisomerase 2-alpha (EC 5.99.1.3;DNA topoisomerase II, alpha isozyme)
Observed Band	
Cell Pathway	Cytoplasm . Nucleus, nucleoplasm . Nucleus . Nucleus, nucleolus .
Tissue Specificity	Expressed in the tonsil, spleen, lymph node, thymus, skin, pancreas, testis, colon, kidney, liver, brain and lung (PubMed:9155056). Also found in high-grade lymphomas, squamous cell lung tumors and seminomas (PubMed:9155056).
Function	catalytic activity:ATP-dependent breakage, passage and rejoining of double-stranded DNA.,enzyme regulation:Specifically inhibited by the intercalating agent amsacrine.,function:Control of topological states of DNA by transient breakage and subsequent rejoining of DNA strands. Topoisomerase II makes double-strand breaks.,miscellaneous:Eukaryotic topoisomerase I and II can relax both negative and positive supercoils, whereas prokaryotic enzymes relax only negative supercoils.,PTM:Phosphorylation has no effect on catalytic activity.,similarity:Belongs to the type II topoisomerase family.,subcellular location:Generally located in the nucleoplasm.,subunit:Homodimer. Interacts with COPS5.,

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 pla
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

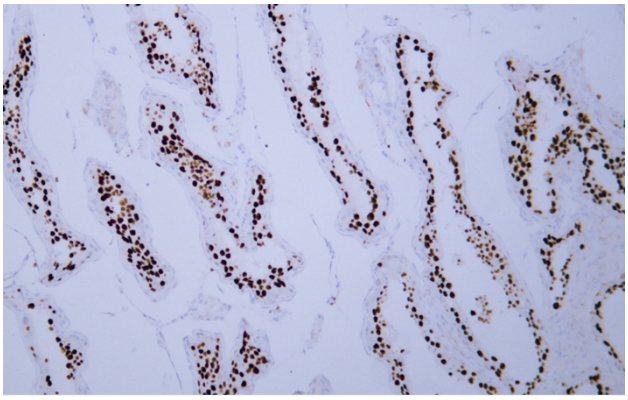
Products Images



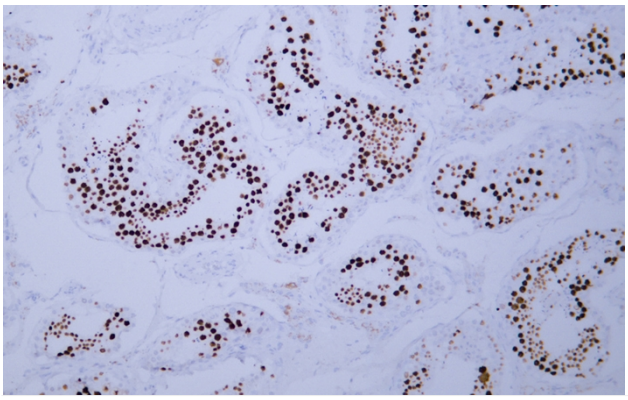
Human lung squamous cell carcinoma tissue was stained with Anti-Topoisomerase IIα (ABT272) Antibody



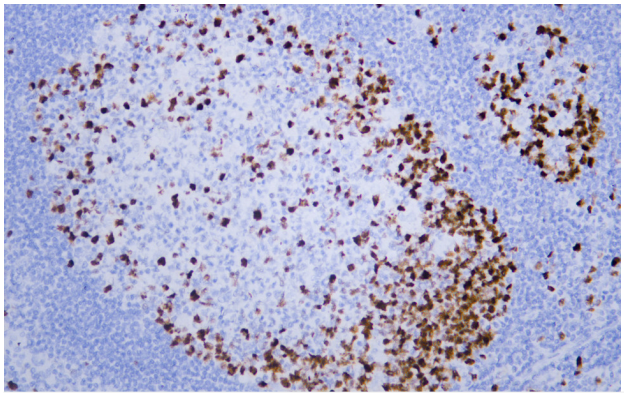
Human lymphoma tissue was stained with Anti-Topoisomerase IIα (ABT272) Antibody



Human seminoma tissue was stained with Anti-Topoisomerase IIα (ABT272) Antibody



Human testis tissue was stained with Anti-Topoisomerase IIα (ABT272) Antibody



Human tonsil tissue was stained with
Anti-Topoisomerase IIα (ABT272) Antibody