

# Topoisomerase IIα Mouse Monoclonal Antibody

# Catalog #: EAB21471

Host/Isotype	Clonality	Applications	MW (kDa)	Reactivity
Mouse IgG1	Monoclonal	WB, IHC-P, IF/ICC	174	Human, Mouse, Rat

#### **Applications Dilutions**

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

WB(Western Blotting)	1:500-2000
IHC-P(Immunohistochemistry-Paraffin)	1:100-500
IF/ICC(Immunofluorescence/Immunocytochemistry)	1:100-500

#### **Product Information**

Conjugate	Unconjugate
Specificity	Topoisomerase II $\alpha$ Mouse Monoclonal Antibody detects endogenous levels of Topoisomerase II $\alpha$ protein.
Purification	Affinity purification
Concentration	1mg/ml
Format	Liquid
Formulation	In PBS, pH 7.4, Containing 0.02% sodium azide, 0.5% BSA and 50% Glycerol
Shipping	Gel Pack
Storage	Store at -20°C least 1 year from the date of shipment. Avoid repeated freeze/thaw cycles. Aliquots may be stored at +4°C for 1-2 weeks
UniProt ID	<u>P11388</u>
Entrez-Gene Id	7153

### **Product Description**

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 play a role in ataxia-telangiectasia.

### For Reserch Use Only. Not For Use In Diagnostic Procedures