

#### Product datasheet for TA802684BM

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

# Topoisomerase II alpha (TOP2A) Mouse Monoclonal Antibody (HRP conjugated) [Clone ID: OTI1D2]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: OTI1D2
Applications: IHC, WB

**Reactivity:** WB 1:2000, IHC 1:150 Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Human recombinant protein fragment corresponding to amino acids 1100-1531 of human

TOP2A(NP\_001058) produced in E.coli.

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol.

**Concentration:** 0.5 mg/ml

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: HRP

Storage: Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Predicted Protein Size:** 174.2 kDa

Gene Name: topoisomerase (DNA) II alpha

Database Link: NP 001058

Entrez Gene 21973 MouseEntrez Gene 360243 RatEntrez Gene 7153 Human

P11388



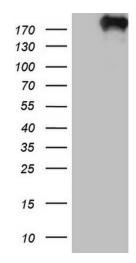
Background:

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 play a role in ataxia-telangiectasia. [provided by RefSeq, Jul

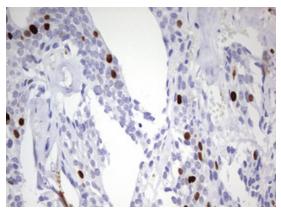
Synonyms: TOP2; TOP2alpha; TOPIIA; TP2A

**Protein Families:** Druggable Genome

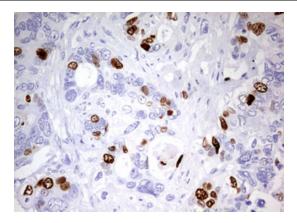
#### **Product images:**



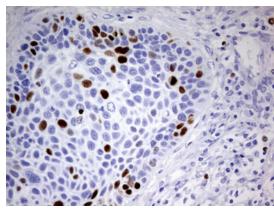
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY TOP2A ([RC221568], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-TOP2A. Positive lysates [LY420704] (100ug) and [LC420704] (20ug) can be purchased separately from OriGene.



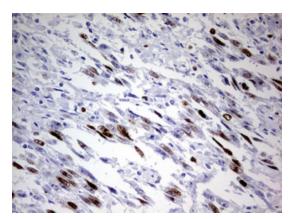
Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])



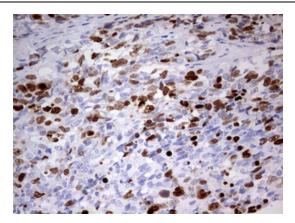
Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])



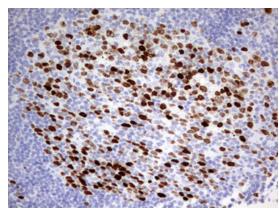
Immunohistochemical staining of paraffinembedded Carcinoma of Human lung tissue using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])



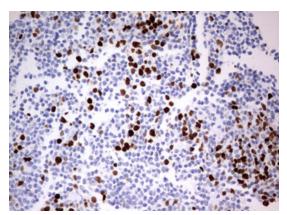
Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])



Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human endometrium tissue using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])

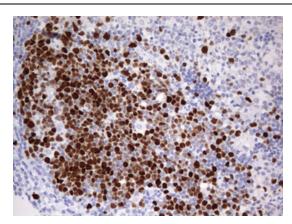


Immunohistochemical staining of paraffinembedded Human lymph node tissue within the normal limits using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])



Immunohistochemical staining of paraffinembedded Human lymphoma tissue using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])





Immunohistochemical staining of paraffinembedded Human tonsil within the normal limits using anti-TOP2A mouse monoclonal antibody. (Heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH9.0, 120°C for 3min, [TA802684])