

PRODUCT INFORMATION SHEET

Mouse Monoclonal Antibody to TOP2A

Format: PURE RUO REF IQP-1866P Quantity: 0.1mg

Description

Clone 6D4B2

Isotype Mouse IgG1
Specificity TOP2A

Alternative names

TOP2; TP2A

Species Human

Immunogen Purified recombinant fragment of human TOP2A (AA: 1100-1530) expressed in E. Coli.

Mw 174.4kDa

Format Purified antibody in PBS with 0.05% sodium azide

Summary

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.

Applications WB:1/500 - 1/2000; IHC:1/200 - 1/1000; ELISA:1/10000

Limitations

- 1. Conjugates with brighter fluorochromes, like PE and APC, will have a greater separation than those with dyes like FITC and CyQ. When populations overlap, the percentage of positive cells using a selected marker can be affected by the choice of fluorescent label.
- Use of monoclonal antibodies in patient treatment can interfere with antigen target recognition by this reagent. This should be taken into account when samples are analyzed from patients treated in this fashion. IQ Products has not characterized the effect of the presence of therapeutic antibodies on the performance of this reagent.
- 3. Reagents can be used in different combinations, therefore laboratories need to become familiar performance characteristics of each antibody in relation with the combined markers in normal and abnormal samples.
- 4. Reagent data performance is based on EDTA-treated blood. Reagent performance can be affected by the use of other anticoagulants.

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Handling and Storage

Store the vials at 2-8 °C for a maximum of 2 weeks and store at -20°C for longer term storage. Monoclonal antibodies should be protected from prolonged exposure to light when conjugated with fluorochromes. Reagents are stable for the period shown on the vial label when stored properly.

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Warranty

Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

Characterization

To ensure consistently high-quality reagents, each batch of monoclonal antibody is tested for conformance with characteristics of a standard reagent.

Warning

All products contain sodiumazide. This chemical is poisonous and hazardous. Handling should be done by trained staff only.

References

1.Asian Pac J Cancer Prev. 2018 Dec 25;19(12):3581-3589. 2.BMC Cancer. 2018 Mar 27;18(1):331.

Explanation of used symbols

REF	Consult instructions for use Catalogue number
E	Sufficient for
\triangle	Caution, consult accompanying document
*	Keep away from (sun)light
፟	Biological risks
*	Temperature limitation (°C)
RUO	For Research Use Only
LOT	Batch code
<u>Z</u>	Use by yyyy-mm-dd
"	Manufacturer

		Label - tandem	Ex -max (nm)	Em -max (nm)
P	PURE	purified material	-	-
F	FITC	FITC	488	519
R	R-PE	PE PI	488, 532	578
С	CyQ	PE-Cy5.18	488, 532	667
Α	APC		595, 633, 635, 647	660
PC	PerCP		488, 532	678
PCC	PerCP-Cy5.5		488, 532	695



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