

Anti- human TOP2A Mouse Monoclonal Antibody

Clone: UMAB145 REF RU00007

CATALOG NUMBER: R0007MA01-MA, 0.1mL; R0007MA05-MA, 0.5 mL; R0007MA10-MA, 1.0 mL

Intended use

Anti-human TOP2A (Clone: UMAB145) Mouse Monoclonal Antibody is intended for research use only. Not for use in diagnostic procedures. Not for human or animal consumption.

Background

DNA topoisomerase II-alpha (gene name: TOP2A) is 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. A variety of mutations have been associated with the development of drug resistance. Reduced activity of this enzyme may also play a role in ataxia-telangiectasia.

Alternative names: TOP2, TP2A

Reagent provided

Anti-human TOP2A Mouse Monoclonal Primary Antibody (Clone: UMAB145) is provided in liquid form in 20mM Sodium phosphate, 150mM Sodium chloride, 0.2% BSA, 0.09% Sodium azide, pH 7.4. The isotype of the antibody is IgG1. The protein concentration is approximately 0.6 +/- 0.05 mg/mL.

For immunohistochemistry, the primary antibody may be used at a working dilution of 1:100 – 1:200 for formalin-fixed, paraffin-embedded human tissue. It can be dependent upon the detection system used. These are guidelines only, and optimal dilutions should be determined by the individual laboratory.

Immunogen

Human recombinant protein fragment corresponding to amino acids 1100-1531 of human TOP2A(NP_001058) was produced in E. coli.

Specificity

The specificity of the anti-human TOP2A Mouse Monoclonal Primary Antibody was established on normal human kidney and human colon cancer. The anti- TOP2A presented no staining on normal human kidney and positive staining on human colon cancer tissue using immunohistochemical (IHC) test methods.

Precautions

1. This product contains sodium azide (NaN₃), a chemical highly toxic in pure form. At product concentrations, though not classified as hazardous, NaN₃ may react with lead and copper plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent metal azide build-up in plumbing.
2. Wear appropriate Personal Protective Equipment to avoid contact with eyes and skin.
3. Unused reagents should be disposed of according to local, State, and Federal regulations.
4. Suitability for specific application may vary and it is the responsibility of the end user to determine the appropriate application for use and stability.

Storage

Store at 2-8°C. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user.

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