

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TOP2A in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant TOP2B from human or mouse is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 680130
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TOP2A Phe1174-Phe1531 Accession # P11388
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunocytochemistry	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

DNA topoisomerase 2- α (TOP2A; also DNA topoisomerase II, α isozyme) is a 170 kDa member of the type II topoisomerase family. Human TOP2A is 1531 amino acids (aa) in length, and splicing variants produce three additional isoforms which have substitutions following Lys321, Gln355, or Ala401. TOP2A contains a histidine kinase-like ATPases domain (aa 80-193), a TopoIIA Trans ScTopoIIA domain (aa 265-417), a TOPRIM TopoIIA: topoisomerase-primase domain (aa 455-575), a DNA Topoisomerase IV domain (aa 697-1169), and a NES (aa 1018-1028). There are multiple potential Ser/Thr phosphorylation sites. Human TOP2A shares 89% aa sequence identity with mouse TOP2A.

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