

# TOP2B(Texas Red)/CEN3q(FITC) FISH Probe

Catalog # FA0502      Size 200 uL

## Specification

<b>Product Description</b>	Made to order FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. ( <a href="#">Technology</a> ).
<b>Origin</b>	Human
<b>Source</b>	Genomic DNA
<b>Reactivity</b>	Human
<b>Notice</b>	We <b>strongly recommend</b> the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: <a href="#">KA2375</a> or <a href="#">KA2691</a> ) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
<b>Regulation Status</b>	For research use only (RUO)
<b>Supplied Product</b>	DAPI Counterstain (1500 ng/mL ) 250 uL
<b>Storage Instruction</b>	Store at 4°C in the dark.

## Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

## Gene Info — TOP2B

<b>Entrez GeneID</b>	<a href="#">7155</a>
<b>Gene Name</b>	TOP2B
<b>Gene Alias</b>	TOP1IB, top2beta
<b>Gene Description</b>	topoisomerase (DNA) II beta 180kDa

Omim ID [126431](#)

Gene Ontology [Hyperlink](#)

#### Gene Summary

This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic state 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, beta, is localized to chromosome 3 and the alpha form is localized to chromosome 17. 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. Alternative splicing of this gene results in two transcript variants; however, the second variant has not yet been fully described. [provided by RefSeq]

#### Other Designations

DNA topoisomerase II beta|DNA topoisomerase II, 180 kD|DNA topoisomerase II, beta isozyme|U937 associated antigen|antigen MLAA-44|topo II beta|topoisomerase (DNA) II beta (180kD)|topoisomerase II beta|topoisomerase IIb

## Disease

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