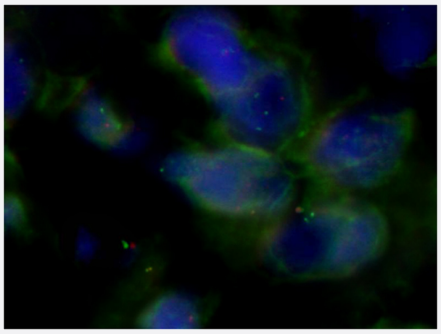
Sm Size

TOP2A/CEN17q FISH Probe

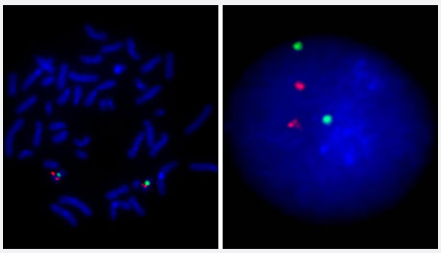
Catalog # FG0007 Size 200 uL, 100 uL

Applications



Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human breast cancer (FFPE) stained with TOP2A/CEN17q FISH Probe. Human breast cancer showed no TOP2A gene amplification.



Hybridization position of the probes on the chromosome.

Hybridization position of the probes on the chromosome.

Specification

Product Description	Labeled FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization T echnique. (Technology).

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Probe 1	**Name:** TOP2A **Size:** Approximately 180kb **Fluorophore:** Texas Red **Location:** 17q21
Probe 2	**Name:** CEN17q **Size:** Approximately 540kb **Fluorophore:** FITC **Location:** 17q11.2
Probe Gap	The gap between two probes is approximately 6,400 kb.
Origin	Human
Source	Genomic DNA
Reactivity	Human
Form	Liquid
Notice	We **strongly recommend** the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: KA2375 or KA2691) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
Regulation Status	For research use only (RUO)
Quality Control Testing	Representative images of normal human cell (lymphocyte) stain with the dual color FISH probe. The l eft image is chromosomes at metaphase, and the right image is an interphase nucleus.
Supplied Products	DAPI Counterstain (1500 ng/mL) 125 uL for each 100 uL FISH Probe
Storage Instruction	Store at 4°C in the dark.
Note	Hybridization position of the probes on the chromosome. Hybridization position of the probes on the chromosome.
Self-Attestation	Abnova self-attests to comply with the U.S. Framework for Nucleic Acid Synthesis Screening

Applications

- Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

  Human breast cancer (FFPE) stained with TOP2A/CEN17q FISH Probe. Human breast cancer showed no TOP2A gene amplification.

  Protocol Download

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- Fluorescent In Situ Hybridization (Cell)

  Protocol Download

Gene Info — TOP2A

Entrez GeneID	7153
Gene Name	TOP2A
Gene Alias	TOP2, TP2A
Gene Description	topoisomerase (DNA) II alpha 170kDa
Omim ID	126430
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a DNA topoisomerase, an enzyme that controls and alters the topologic state s 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 tran scription 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. Tw o forms of this enzyme exist as likely products of a gene duplication event. The gene encoding thi s form, alpha, is localized to chromsome 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 a ctivity of this enzyme may also play a role in ataxia-telangiectasia. [provided by RefSeq
Other Designations	DNA topoisomerase II, 170 kD|DNA topoisomerase II, alpha isozyme|topoisomerase (DNA) II alp ha (170kD)

Disease

- Breast cancer
- Breast Neoplasms
- Genetic Predisposition to Disease
- Leukemia
- Lymphatic Metastasis
- Lymphoma

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- Recurrence
- Stomach Neoplasms

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