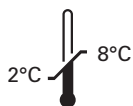


# Kreatech™ FISH probes

## Product Information Sheet

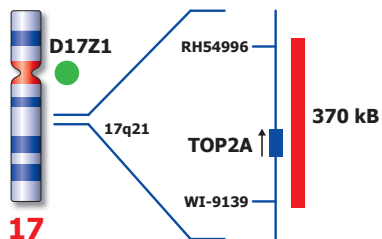
KBI-10724  
TOP2A (17q21) / SE 17



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Not to scale

## Kreatech™ TOP2A (17q21) / SE 17 FISH probe

**Introduction:** Topoisomerase II alpha (TOP2A) is a key enzyme in DNA replication and a molecular target for many important anticancer drugs. TOP2A is amplified or deleted together with amplification of the closely located ERBB2 oncogene in breast cancer.

**Intended use:** The **TOP2A (17q21)** specific FISH probe is optimized to detect copy numbers of the TOP2A gene region at 17q21. The **Satellite Enumeration (SE) 17** FISH probe is included to facilitate chromosome identification.

The probe is recommended to be used in combination with one of the Kreatech Pretreatment kits providing necessary reagents to perform FISH on various sample types for optimal results. (see also [www.LeicaBiosystems.com](http://www.LeicaBiosystems.com) and look for Kits & reagents)

**Critical region 1 (red):** The **TOP2A (17q21)** gene region probe is direct-labeled with PlatinumBright™ 550.

**Control region 2 (green):** The **SE 17** FISH probe is direct-labeled with PlatinumBright™ 495.

**Reagent:** Kreatech probes are direct-labeled DNA probes provided in a ready-to-use format. Apply 10 µl of probe to a sample area of approximately 22 x 22 mm.

**Please refer to the Instructions for Use for the entire Kreatech FISH protocol.**

**Kreatech FISH probes are REPEAT-FREE™ and therefore do not contain Cot-1 DNA. Hybridization efficiency is increased and background, due to unspecific binding, is highly reduced.**

**Interpretation:** The **TOP2A (17q21) / SE 17** FISH probe is designed as a dual-color assay to detect amplifications at 17q21. Amplifications involving the TOP2A gene region at 17q21 will show several red signals, while the control at the chromosome SE 17 specific region will provide 2 green signals (3+R2G). Two single color red and green signals will identify the normal chromosomes 17 (2R2G).

	Normal Signal Pattern	17q21 Amplification	17q21 Deletion
Expected Signals	2R2G	3+R2G	1R2G

**References:** Järvinen et al, 1999, Genes Chrom Cancer 26: 142-150  
Järvinen et al, 2000, Am J Pathol, 156: 839-847

**Warning and precautions:** In case of emergencies check SDS sheets for medical advice. SDS sheets may be obtained by either contacting Leica Technical Support or visiting [www.LeicaBiosystems.com](http://www.LeicaBiosystems.com). DNA probes contain formamide which is a teratogen; do not inhale or allow skin contact. Wear gloves and a lab coat when handling DNA probes. All materials should be disposed of according to your institution's guidelines for hospital waste disposal.

**Reagent Storage and Handling:** Store at 2-8 °C. Reagents should not be used after the expiration date on the vial label.

**TECHNICAL SUPPORT** Technical support is available at [www.LeicaBiosystems.com](http://www.LeicaBiosystems.com) or +31 20 6919181 or via e-mail: [kreatech-support@leicabiosystems.com](mailto:kreatech-support@leicabiosystems.com).

**CUSTOMER SERVICE** Kreatech probes may be ordered through Leica Customer Service +31 20 6919181 or order via e-mail: [purchase.orders@leica-microsystems.com](mailto:purchase.orders@leica-microsystems.com).