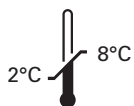


Kreatech™ FISH probes

Product Information Sheet

KBI-10738

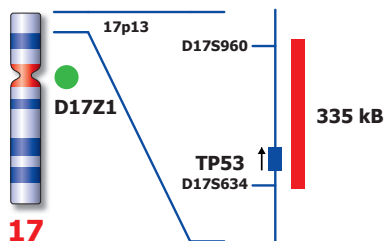
TP53 (17p13) / SE 17 (tissue)



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Not to scale

Kreatech™ TP53 (17p13) / SE 17 (tissue) FISH probe - Optimized for Tissue Hybridization -

Introduction: The tumor protein p53 (TP53) gene plays an essential role in the regulation of the cell cycle. Mutants of TP53 that frequently occur in a number of different human cancers fail to bind the consensus DNA binding site, and hence cause the loss of tumor suppressor activity. Alterations of the TP53 gene occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome.

Intended use: The **TP53 (17p13)** specific FISH probe is optimized to detect copy numbers of the TP53 gene region at 17p13. The **Satellite Enumeration (SE) 17** FISH probe is included to facilitate chromosome identification.

The probe is especially developed for use on FFPE sections.

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 and look for Kits & reagents)

For applications on metaphase/interphase spreads, blood smears and bone marrow cells it is advised to use KBI-10112.

Critical region 1 (red): The **TP53 (17p13)** specific FISH 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 **TP53 (17p13) / SE 17 (tissue)** FISH probe is designed as a dual-color assay to detect deletions at 17p13. Deletions involving the TP53 gene region will show one red signal and two green signals at the chromosome 17 centromere control region (1R2G). Two single color red (R) and green (G) signals will identify the normal chromosomes 17 (2R2G).

	Normal Signal Pattern	Del(17p13)
Expected Signals	2R2G	1R2G

References: Amiel A et al, 1997, Cancer Gener.Cytogenet., 97; 97-100
Drach J et al, 1998, Blood, 92; 802-809

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. 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 or +31 20 6919181 or via e-mail: 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.