

# Kreatech™ FISH probes

## Product Information Sheet

KBI-10113

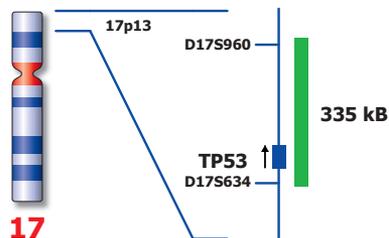
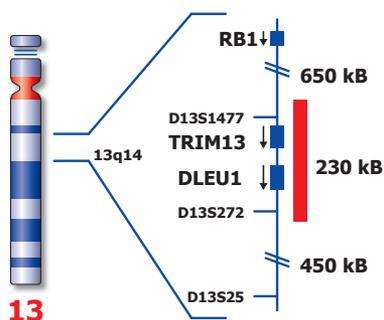
DLEU1 (13q14) / TP53 (17p13)



**Kreatech Biotechnology B.V.**  
Vierweg 20  
1032 LG Amsterdam  
The Netherlands  
[www.LeicaBiosystems.com](http://www.LeicaBiosystems.com)

PI-KBI-10113\_D1.1

Published March 2015



Not to scale

## Kreatech™ DLEU1 (13q14) / TP53 (17p13) FISH probe

**Introduction:** Deletion at 13q involving the band q14 occurs frequently in B-cell chronic lymphocytic leukemia (CLL) and Multiple Myeloma. A minimal critical region has been shown to lie between the RB1 gene and the marker D13S25 containing DLEU1, DLEU2, and TRIM13 genes. Alterations of the TP53 gene (formerly known as p53, 17p13) occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome. Deletions of TP53 are frequent in CLL and MM, usually associated with unfavorable prognosis.

**Intended use:** The **DLEU1 (13q14)** specific FISH probe is optimized to detect copy numbers at the DLEU1 gene region at 13q14. The **TP53 (17p13)** specific FISH probe is optimized to detect copy numbers of the TP53 gene region at 17p13.

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 **DLEU1 (13q14)** specific FISH probe is direct-labeled with PlatinumBright™550  
**Critical region 2 (green):** The **TP53 (17p13)** specific 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 **DLEU1 (13q14) / TP53 (17p13)** FISH probe is designed as a dual-color assay to detect deletions at 13q14 and 17p13. Deletions involving the DLEU1 gene region will show one red signal and two green signals for the TP53 region at 17p13 (1R2G). Deletions involving the TP53 gene region will show one green signal and two red signals for the DLEU1 region at 13q14 (2R1G). Deletions involving both critical regions at 13q14 and 17p13 will show one red and one green signal only (1R1G). Two single color red (R) and green (G) signals will identify the normal chromosomes 13 and 17 (2R2G).

	Normal Signal Pattern	Del(13q14)	Del(17p13)	Del(13q14)(17p13)
Expected Signals	2R2G	1R2G	2R1G	1R1G

**References:** Stilgenbauer S et al, 1998, Oncogene, 16; 1891 – 1897  
 Wolf S et al, 2001, Hum. Molec. Genet., 10; 1275-1285

**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 formaldehyde 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).