

# Kreatech™ FISH probes

## Product Information Sheet

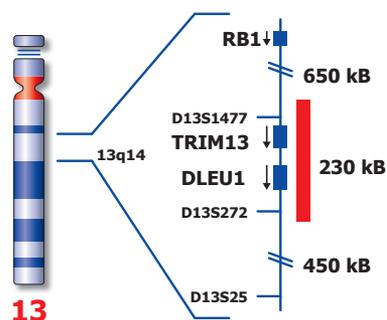
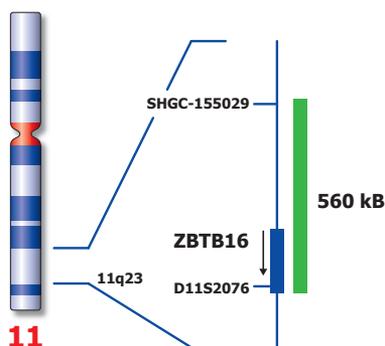
KBI-10502  
11q23 / DLEU1 (13q14)



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Not to scale

## Kreatech™ 11q23 / DLEU1 (13q14) FISH probe

**Introduction:** Deletion at 13q involving the band q14 occurs frequently in Multiple Myeloma and Chronic Lymphocytic Leukemia. A minimal critical region has been shown to lie between the RB1 gene and the marker D13S25 containing DLEU1, DLEU2, and TRIM13 (previously known as RFP2) genes. Amplification of 11q involving band 11q23 is reported in Multiple Myeloma patients and belongs to the group of aberrations defining the hyperdiploid subgroup.

**Intended use:** The **11q23** specific FISH probe is optimized to detect copy numbers at 11q23. The **DLEU1 (13q14)** specific DNA region is optimized to detect copy numbers of the DLEU1 gene region at 13q14.

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 **11q23** 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 **11q23 / DLEU1 (13q14)** FISH probe is designed as a dual-color assay to detect deletions or amplifications at 11q23 and 13q14. Deletions involving the 13q14 region will show one red signal and two green signals for the 11q23 region (1R2G). Amplifications involving the 11q23 region will show three or more green signals and two red signals for the 13q14 region (2R3+G). Deletions and Amplifications involving both critical regions at 13q14 and 11q23 will show one red and three or more green signals (1R3+G). Two single color red (R) and green (G) signals will identify the normal chromosomes 13 and 11 (2R2G).

	Normal Signal Pattern	Del(13q14)	Amp(11q23)	Del(13q14) Amp(11q23)
Expected Signals	2R2G	1R2G	2R3+G	1R3+G

**Note:** In CLL patients also Nullo-somie for 13q14 may occur. Using this probe a signal pattern of two green signals (2G) will be observed

**References:** Cremer F et al, 2005, Genes Chromosomes Cancer, 44; 194-203

**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).