

# Kreatech™ FISH probes

## Product Information Sheet

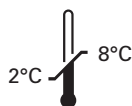
KI-10210

5q- (5q31; 5q33) / TERT (5p15) Triple-Color  
100 µl

**DANGER**



**FORMAMIDE**



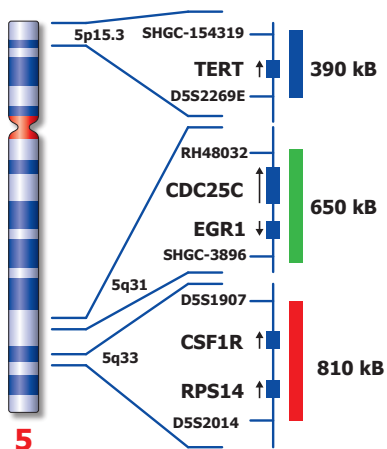
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**RUO - Research Use Only**

Not for use in diagnostic procedures

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Not to scale

## Kreatech™ 5q- (5q31; 5q33) / TERT (5p15) Triple-Color FISH probe

**Introduction:** The **5q- (5q31; 5q33)** FISH probe is optimized simultaneously to detect the CDC25C/EGR1 gene region at 5q31 and the CSF1R/RPS14 gene region at 5q33 in a triple-color (TC) assay.

**Critical region 1 (red):** The **5q33 (CSF1R/RPS14)** specific FISH probe is direct-labeled with PlatinumBright™550.  
**Critical region 2 (green):** The **5q31 (CDC25C/EGR1)** specific FISH probe is direct-labeled with PlatinumBright™495.  
**Control region (blue):** The **TERT (5p15)** specific FISH probe is added as a control and direct-labeled with PlatinumBright™415

**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 **5q- (5q31; 5q33) / TERT (5p15) TC** FISH probe is designed as a triple-color assay to detect deletions at 5q31 and 5q33. Deletions involving both critical regions at 5q31 and 5q33 will show loss of one red and one green signal (1R1G) and two blue signals for the TERT (5p15) control region. Deletions involving CSF1R/RPS14 gene region at 5q33 only will show one red signal, two green signals for the CDC25C/EGR1 region at 5q31 and two blue signals for the TERT (5p15) control region (1R2G2B). Deletions involving the CDC25C/EGR1 gene region at 5q31 only will show one green signal, two red signals for the CSF1R/RPS14 region at 5q33 and two blue signals for the TERT (5p15) control region (2R1G2B). Two single color red (R), green (G), and blue (B) signals will identify the normal chromosomes 5 (2R2G2B).

	Normal Signal Pattern	Del(5q31)(5q33)	Del(5q33)	Del(5q31)
Expected Signals	2R2G2B	1R1G2B	1R2G2B	2R1G2B

**References:** Zhao N et al, PNAS, 94; 6948-6953  
 Boultonwood J et al, 2002, Blood, 99; 4638-4641  
 Wang et al, Haematologica 2008; 93: 994-1000  
 Ebert BL et al, Nature 2008; 451: 335-339  
 Mohamedali A and Muftic GJ, Brit J Haematol 2008; 144: 157-168

**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/service-support/technical-support/](http://www.LeicaBiosystems.com/service-support/technical-support/) or toll free at 800-248-0123 or via e-mail: [kreatech-support@leicabiosystems.com](mailto:kreatech-support@leicabiosystems.com).

**CUSTOMER SERVICE** Kreatech probes may be ordered through Leica Customer Service toll free at 800-248-0123 or order via e-mail: [purchase.orders@leica-microsystems.com](mailto:purchase.orders@leica-microsystems.com).