

# Kreatech™ FISH probes

## Product Information Sheet

KI-10205

MECOM t(3;3); inv(3) (3q26) Break, Triple-

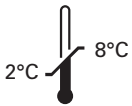
Color

100 µl

**DANGER**



**FORMAMIDE**



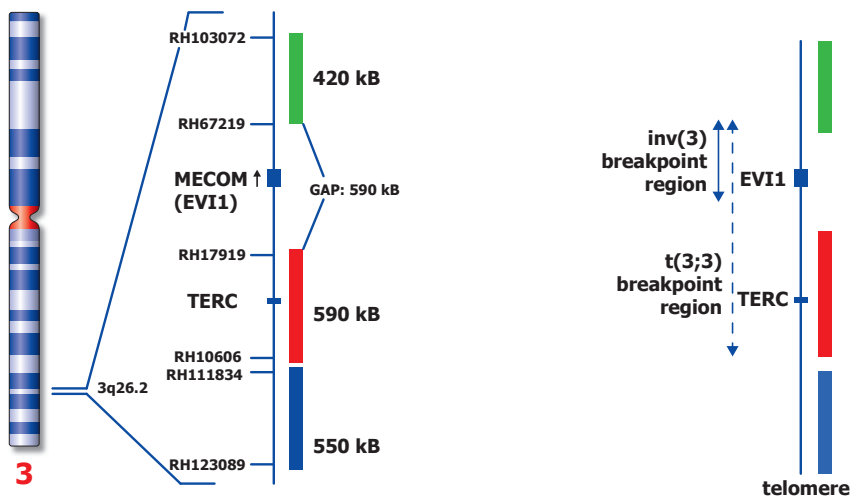
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**RUO - Research Use Only**

Not for use in diagnostic procedures

PI-KI-10205\_D3.2

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Not to scale

KI-10205

## Kreatech™ MECOM t(3;3); inv(3)(3q26), Break Triple-Color FISH probe

**Introduction:** The **MECOM t(3;3); inv(3)(3q26) Break Triple-Color** FISH probe is optimized to detect the inversion of chromosome 3 involving the MECOM (previously known as EVI) gene region at 3q26 in a triple-color, split assay.

**Critical region 1 (red):** The **distal MECOM** gene region probe is direct-labeled with PlatinumBright™550.  
**Critical region 2 (green):** The **proximal MECOM** gene region probe is direct-labeled with PlatinumBright™495.  
**Critical region 3 (blue):** The **further distal MECOM** gene region probe is 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.**

**Pattern:** The **MECOM t(3;3); inv(3)(3q26) Break Triple-Color** FISH probe is designed as a triple-color split probe to detect inversion or translocations at the MECOM gene region at 3q26. A break is defined as a blue/red/green fusion signal (BRG) splitting into separate blue/red (BR) and green (G) or blue (B) and red/green (RG) signals. Only signals which are more than one signal diameter apart from each other are counted as a break. Two co-localized blue/red/green signals identify the normal chromosome(s) 3.

	Normal Signal Pattern	t(3;3), inv(3)	Variant breakpoints*
Expected Signals	2BRG	1BRG1BR1G	1BRG1BRg1g or 1BRG1Gr1Br or 1BRG1B1RG

\*) Variant breakpoints for the inv(3) may occur within a relatively large region (see figure on the right). Breakpoints proximal of the MECOM gene will result in a split of the green signal (1BRG1BRg1g). The green probe is located more proximally compared to the dual-color MECOM probe (KI-10204), to minimize the chance of a split green signal. The breakpoints for t(3;3) are located distal to the MECOM gene and may result in a break within the red probe (1BRG1Br1Gr). Breaks occurring distally of the red probe will result in a separate blue signal (1BRG1B1RG).

**Limitations:** Signal patterns other than those described above may indicate variant translocations, insertions or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

**References:** De Braekeleer et al, 2011, Anticancer Res, 31; 3441-3448;  
Cui W. et al, 2011, Am J Clin Pathol, 136; 282-288  
Shearer B. et al, 2010, Am J Hematol, 85:569-574;  
De Melo V. et al, 2007, Leukemia aop, 13 Sep, 1-4  
Levy E. et al, 1994, Blood, 83; 1348-1354;  
Wieser R et al, 2003, Haematologica, 88; 25-30

**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).