

Kreatech™ FISH probes

Product Information Sheet

KBI-10304

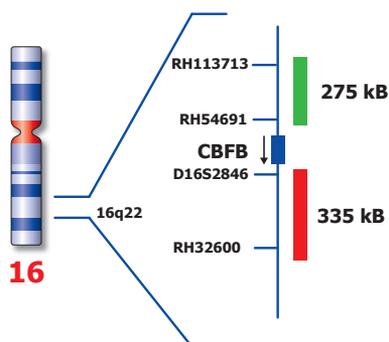
CBFB t(16;16), inv(16) Break



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PI-KBI-10304_D1.1

Published March 2015



Not to scale

Kreatech™ CBFB t(16;16), inv(16) Break FISH probe

Introduction: The pericentric inversion of chromosome 16 and the t(16;16) are two recurrent aberrations in bone marrow of patients with acute myeloid leukaemia (AML). The inversion creates a novel fusion gene between CBFB (16q22) and MYH11 (16p13), which appears to be critical for leukemic transformation. In 20% of all cases the inv(16) is associated with an additional deletion of sequences proximal to the 16p-arm breakpoint.

Intended use: The **CBFB t(16;16), inv(16) Break** FISH probe is optimized to detect the inversion of chromosome 16 involving the CBFB gene region at 16q22 in a dual-color, split assay on metaphase/interphase spreads, blood smears and bone marrow cells.

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)

Critical region 1 (red): The **distal CBFB** gene region probe is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **proximal CBFB** gene region 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 **CBFB t(16;16), inv(16) Break** FISH probe is designed as a dual-color split probe to detect inversion or translocations at 16q22. A break is defined when a red/green or yellow fusion signals (F) splits into separate red and green signals. Only red and green signals which are more than one signal diameter apart from each other are counted as a break. Co-localized red/green or yellow signals identify the normal chromosome(s) 16.

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

	Normal Signal Pattern	t(16;16), inv(16)
Expected Signals	2F	1F1R1G

References: Dauwse JG et al, 1993, Hum.Mol.Genet., 2; 1527-1534
 Poirer H et al, 1995, Blood, 85; 1313-1322

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.