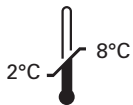


Kreatech™ FISH probes

Product Information Sheet

KBI-10006

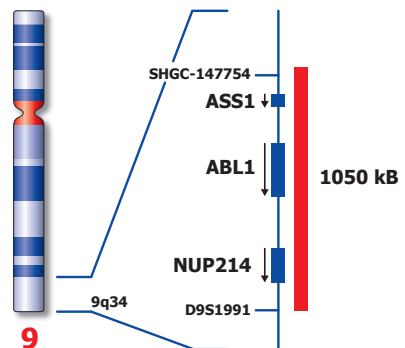
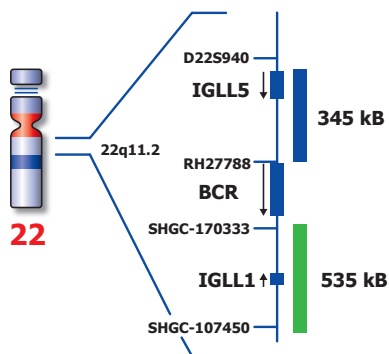
BCR/ABL1 t(9;22) Triple-Color, Dual-Fusion



Kreatech Biotechnology B.V.
Vierweg 20
1032 LG Amsterdam
The Netherlands
www.LeicaBiosystems.com

PI-KBI-10006_D1.1

Published March 2015



Not to scale

Kreatech™ BCR/ABL1 t(9;22) Triple-Color, Dual-Fusion FISH probe

Introduction: Chronic Myeloid Leukemia (CML) is characterized by the formation of the BCR/ABL1 fusion gene as a result of the reciprocal translocation t(9;22)(q34;q11). The BCR/ABL1 fusion gene is found on the derivative chromosome 22, called the Philadelphia (Ph) chromosome. The same translocation is also observed in Acute Lymphocytic Leukemia (ALL) and in Acute Myeloid Leukemia (AML).

Intended use: The BCR/ABL1 FISH probe is optimized to detect the t(9;22)(q34;q11) reciprocal translocation in a triple-color, dual-fusion 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): Sequences flanking the ABL1 (9q34) gene region are direct-labeled in red with PlatinumBright™550.
Critical region 2 (blue): The proximal sequences flanking the BCR (22q11) gene region are direct-labeled in blue with PlatinumBright™415

Critical region 3 (green): The distal sequences flanking the BCR (22q11) gene region are direct-labeled in green 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 BCR/ABL1 t(9;22) Triple-Color, Dual-Fusion FISH probe is designed as a dual-fusion probe to detect both rearranged chromosomes by a co-localized red/green (yellow) and a red/blue (purple) fusion signal (F). Deletions at the proximal 5' site of ABL1 (9q34) will lead to lack of a red signal and a single green signal for 3' distal sequences of the BCR gene region. Deletions at the 3' site of the BCR (22q11) gene will lead to lack of a green signal. Single color red (R) and green/blue (GB) signals will identify the normal chromosomes 9 and 22.

Signal patterns other than those described above may indicate variant translocations, deletions on der(9), der(22), double Ph chromosome or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	t(9;22) BCR/ABL	t(9;22) del(distal 22q11)	t(9;22) del(proxi 9q34)
Expected Signals	2R2GB	1R1GB2F (=1RG and 1RB)	2R1GB1RB	1R1GB1G1RB

References: Kolomietz et al., 2001. Blood 97; 3581-3588
 Huntly et al, 2003, Blood 102; 1160-1168

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.