

Kreatech™ FISH probes

Product Information Sheet

KBI-10607

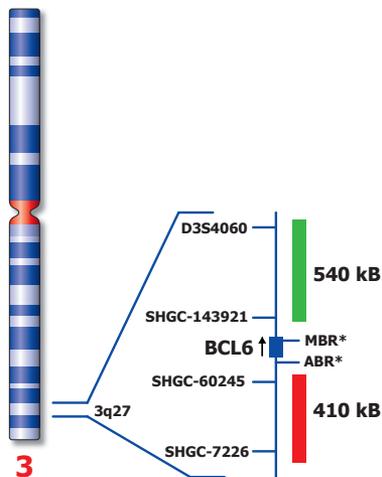
BCL6 (3q27) Break



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

PI-KBI-10607_D1.1

Published March 2015



ABR* atypical breakpoint region
MBR* major breakpoint region

Not to scale

Kreatech™ BCL6 (3q27) Break FISH probe

Introduction: Chromosomal translocations at band 3q27 affecting the BCL6 locus are among the most frequently observed changes in B-NHL. A FISH strategy using two differently labeled flanking BCL6 probes provides a robust, sensitive, and reproducible method for the detection of common and uncommon abnormalities of BCL6 gene in interphase nuclei.

Intended use: The **BCL6 (3q27) Break** FISH probe is optimized to detect translocations involving the BCL6 gene region at 3q27 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 BCL6** gene region probe is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **proximal BCL6** 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 **BCL6 (3q27) Break** FISH probe is designed as a dual-color split probe to detect translocations at 3q27. 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) 3.

Two different breakpoint regions have been identified; the major breakpoint region (MBR) is located within the 5' noncoding region of the BCL6 proto-oncogene, while the atypical breakpoint region (ABR) is located approximately 200 kb distal to the BCL-6 gene. The **BCL6 (3q27) Break** FISH probe is designed in a way to flank both possible breakpoints, thereby providing clear split signals in either case. 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	3q27 split
Expected Signals	2F	1F1R1G

References: Butler MP, 2002, Cancer Res, 62; 4089-4094.
 Sanchez-Izquierdo D, 2001, Leukemia, 15; 1475-1484.

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.