

Kreatech[™] FISH probes Product Information Sheet

KBI-10611 MYC (8q24), Triple-Color, Break







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

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Kreatech™ MYC (8q24), Triple-Color, Break FISH probe

Introduction:	Translocations involving chromosome 8 at band q24 and one of the Immunoglobulin (IG) loci on chromosomes 14q32, 22q11, or 2p11 are the hallmark of Burkitt's lymphoma and diffuse large-B-cell lymphoma. The exact localization of the breakpoints at chromosome 8q24 can vary significantly from patient to patient scattering over a distance of more than 1,000 kb.
Intended use:	The MYC (8q24) Break FISH probe is optimized to detect rearrangements involving the 8q24 locus in a triple-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 <u>www.LeicaBiosystems.com</u> and look for Kits & reagents)
Critical region 1 (green): Critical region 2 (blue): Critical region 3 (red):	The proximal MYC (8q24) specific FISH probe is direct-labeled with Platinum <i>Bright</i> ™495. The MYC (8q24) specific FISH probe is direct-labeled with Platinum <i>Bright</i> ™415. The distal MYC (8q24) specific FISH probe is direct-labeled with Platinum <i>Bright</i> ™550.
Reagent:	Kreatech probes are direct-labeled DNA probes provided in a ready-to-use format. Apply 10 μI 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 MYC (8q24) , Triple-Color, Break FISH probe is designed as a Triple-Color split probe to detect rearranged chromosomes 8. A split or break is defined when a green/red/blue or pink fusion signal (F) splits into separate red/blue and green/blue or green and red/blue or green/blue and red signals. Only signals which are more than one signal diameter apart from each other are counted as a break. Co-localized green/blue/red or pink signals identify the normal chromosome(s) 8.
	Signal patterns other than those described above may indicate variant translocations, deletions or amplifications on der(8) or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	8q24 Break	8q24 Proximal Break	8q24 Distal Break
Expected Signals	2F (GBR)	1F1GB1RB	1F1G1RB	1F1GB1R

References:

Fabris et al, 2003, Genes Chromosomes Cancer 37; 261-269 Hummel et al., 2006, N Engl J Med 354; 2419-30.

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 <u>www.LeicaBiosystems.com</u>. 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: keicabiosystems.com or +31 20 6919181
CUSTOMER SERVICE	Kreatech probes may be ordered through Leica Customer Service +31 20 6919181 or order via e-mail: <u>purchase.orders@leica-microsystems.com</u> .