

Kreatech™ FISH probes

KBI-10601 IGH (14q32) Break





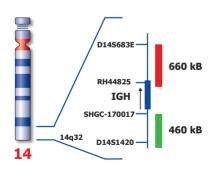




Kreatech Biotechnology B.V. Vlierweg 20 1032 LG Amsterdam The Netherlands www.LeicaBiosystems.com

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Kreatech™ IGH (14q32) Break FISH probe

Introduction: Translocations involving the immunoglobulin heavy chain (IGH) locus are frequent in Multiple

Myeloma and Lymphomas. Translocations involving an IGH switch region uniquely dissociate the intronic and 3' IGH enhancers, so that an oncogene might be juxtaposed to an IGH

enhancer on each of the derivative chromosomes.

Intended use: The IGH (14g32) Break FISH probe is optimized to detect translocations involving the IGH

gene region at 14q32 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): Critical region 2 (green):

The **proximal IGH** gene region probe is direct-labeled with Platinum*Bright*™550. The **distal IGH** gene region probe is direct-labeled with Platinum*Bright*™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 IGH Break FISH probe is designed as a dual-color split probe to detect inversion or

translocations at 14g32. A break is defined when a red/green or yellow fusion signal (F) splits into separate red and green signals. Only red and green signals more than one signal diameter apart from each other are counted as a break. Co-localized red/green or vellow

signals identify the normal chromosome(s) 14.

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	14q32 Split
Expected Signals	2F	1F1R1G

Nishida K et al, 1997, Blood, 90; 526-534 References:

Ueda Y et al. 1996. Blood. 87: 292-298

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.