

Kreatech™ FISH probes

Product Information Sheet

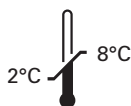
KBI-10403
ETV6 (12p13) Break

IVD

DANGER



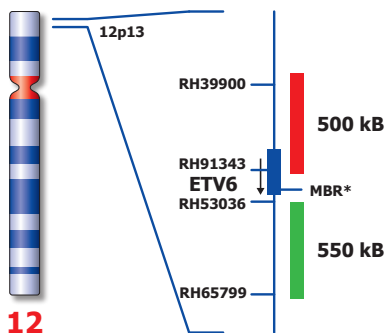
FORMAMIDE



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MBR* major breakpoint region

Kreatech™ ETV6 (12p13) Break FISH probe

Introduction: Chromosomal rearrangements involving the ETV6 (previously known as TEL) gene at 12p13 are found in a wide variety of human leukemias but are particularly common in childhood acute lymphoblastic leukemia. The most frequent translocation is t(12;21) ETV6-RUNX1. In addition 12p abnormalities involve translocations such as t(1;12), t(5;12), t(12;13), t(2;12), and t(12;17). Approximately 15-20% of the 12p abnormalities are deletions of the non-rearranged chromosome.

Intended use: The **ETV6 Break** FISH probe is optimized to detect translocations involving the ETV6 region at 12p13 in a dual-color, split assay on metaphase/interphase spreads 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 ETV6** gene region is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **proximal ETV6** gene region 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 **ETV6 (12p13) Break** FISH probe is designed as a dual-color split probe to detect translocations at 12p13. 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 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) 12.

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	12p13 Split
Expected Signals	2F	1F1R1G

References: Golub et al, 1995, PNAS 92; 4917-4921
 Ford et al, 2001, Blood 98; 558-564

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.