Kreatech™ FISH probes

Product Information Sheet

KBI-10737

FGFR1 (8p11) Break

IVD

DANGER

FORMAMIDE

2°C 8°C

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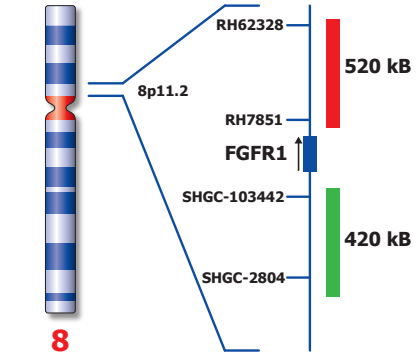

KBI-10737

Kreatech™ FGFR1 (8p11) Break FISH probe

Introduction:

Translocations affecting the chromosomal locus **FGFR1 (8p11)** are hallmarks of an atypical stem cell myeloproliferative disorder. These events disrupt the fibroblast growth factor receptor 1 (FGFR1) gene and fuse the FGFR1 C-terminal catalytic domain with unrelated proteins. FGFR1 amplification is found in 8.7% of breast cancers and is an independent predictor of outcome.

Intended use:

The **FGFR1 (8p11) Break** FISH probe is optimized to detect translocations involving the FGFR1 gene region at 8p11 in a dual-color assay on FFPE tissue sections.

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 FGFR1** gene region probe is direct-labeled with Platinum*Bright*™550.
Critical region 2 (green): The **proximal FGFR1** 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 **FGFR1 (8p11) Break** FISH probe is designed as a dual-color split probe to detect translocations at 8p11. A break is defined when a red/green or yellow fusion signal (F) splits into separate red and green signals. Only (R) red and green (G) 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) 8.

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	8p11 Split	8p11 Amplification
Expected Signals	2F	1F1R1G	3+F

References:

Smedley et al, 1998, Hum Mol Genet. 7; 637-642.

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.