Kreatech™ FISH probes

Product Information Sheet

KBI-10004

PDGFRB (5q32) Break

IVD

DANGER

FORMAMIDE

2°C 8°C

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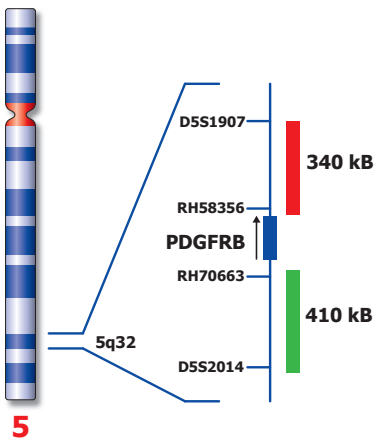

Not to scale

KBI-10004

Kreatech™ PDGFRB (5q32) Break FISH probe

Introduction:

Translocations that disrupt and constitutively activate the platelet-derived growth factor receptor β (PDGFRB) gene at chromosome band 5q32 have been described in patients with BCR-ABL-negative chronic myeloproliferative disorders (CMPD) and myelodysplastic / myeloproliferative diseases (MDS/MPD).

Intended use:

The **PDGFRB (5q32) Break** FISH probe is optimized to detect translocations involving the PDGFRB gene region at 5q32 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 **proximal PDGFRB** gene region is direct-labeled with Platinum*Bright*™550.
Critical region 2 (green): The **distal PDGFRB** gene region 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 **PDGFRB (5q32) Break** FISH probe is designed as a dual-color split probe to detect translocations at 5q32. 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) 5.

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	5q32 Split
Expected Signals	2F	1F1R1G

References:

Pardanani A, Tefferi A., 2004, Blood, 104; 1931-1939

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.