

Kreatech™ FISH probes

Product Information Sheet

KI-10752
ROS1 (6q22) Break
100 µl

DANGER



FORMAMIDE



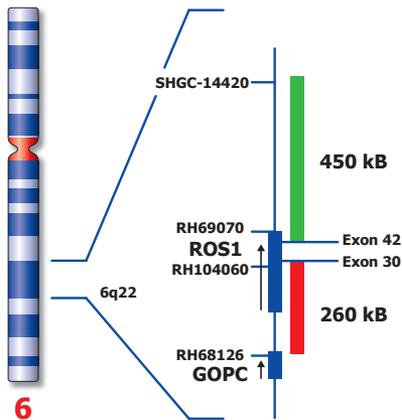
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RUO - Research Use Only

Not for use in diagnostic procedures

PI-KI-10752_D2.1

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Not to scale

KI-10752

Kreatech™ ROS1 (6q22) Break FISH probe

Introduction: The **ROS1 (6q22) Break** FISH probe is optimized to detect translocations involving the ROS1 gene region at the 6q22 locus, as well as the 240 kb deletion forming the ROS1-GOPC fusion gene, in a dual-color assay on formalin-fixed paraffin-embedded tissue samples.

Critical region 1 (red): The **distal ROS1 (6q22)** gene region is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **proximal ROS1 (6q22)** 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.

Pattern: The **ROS1 (6q22) Break** FISH probe is designed as a dual color probe to detect rearranged chromosomes 6. A split or break in case of a translocation at 6q22 results in a green/red or yellow fusion signal (F) splitting into separate red and green signals (1F1G1R). Only signals which are more than one signal diameter apart from each other are counted as a break. Deletions distal of the ROS1 gene will result in the absence of a red signal and thus show one normal fusion signal and one green signal (1F1G). Detectable deletions include the 240 kb deletion fusing the ROS1 to the GOPC gene. Co-localized green/red or yellow fusion signals identify the normal chromosome(s) 6 (2F). Signal patterns other than those described above may indicate variant translocations, deletions or amplifications on der(6) or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	6q22 Break	Deletion distal of ROS1
Expected Signals	2F	1F1G1R	1F1G

References: Charest et al., Genes Chromosomes Cancer, 2003, 37: 58-71
Rikova et al., Cell, 2007, 131: 1190-120
Rimkunas et al., Clin. Can. Res., 2012, 18: 4449-4457
Takeuchi et al., Nat. Med., 2012, 18: 378-381
Gu et al., PLoS, 2011, 6: e15640

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/service-support/technical-support/ or toll free at 800-248-0123 or via e-mail: kreatech-support@leicabiosystems.com.

CUSTOMER SERVICE Kreatech probes may be ordered through Leica Customer Service toll free at 800-248-0123 or order via e-mail: purchase.orders@leica-microsystems.com.