

Kreatech™ FISH probes

Product Information Sheet

KBI-10509

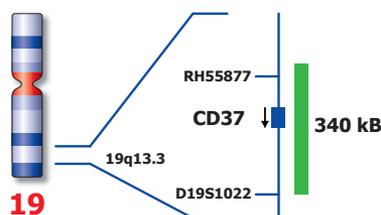
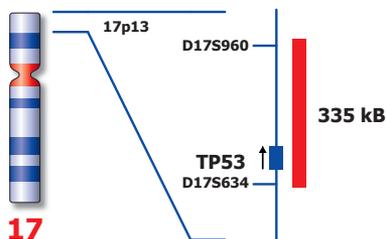
19q13 / TP53 (17p13)



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PI-KBI-10509_D1.1

Published March 2015



Not to scale

Kreatech™ 19q13 / TP53 (17p13) FISH probe

Introduction: Gain involving band 19q13 has recently been described in Multiple Myeloma. This aberration, together with others, is discussed to define a hyperdiploid subgroup in Multiple Myeloma patients. Alterations of the TP53 gene (p53, 17p13) occur not only as somatic mutations in human malignancies, but also as germline mutations in some cancer-prone families with Li-Fraumeni syndrome. Deletions of TP53 are frequent in CLL and MM, usually associated with unfavorable prognosis.

Intended use: The **19q13** specific FISH probe is optimized to detect copy numbers at 19q13. The **TP53 (17p13)** specific DNA region is optimized to detect copy numbers of the TP53 gene region at 17p13.

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 **TP53 (17p13)** specific FISH probe is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **19q13** specific FISH probe 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 **19q13 / TP53 (17p13)** FISH probe is designed as a dual-color assay to detect deletions or amplifications at 19q13 and 17p13. Deletions involving the TP53 (17p13) region will show one red signal and two green signals for the 19q13 region (1R2G). Amplifications involving the 19q13 region will show three or more green signals and two red signals for the 17p13 region (2R3+G). Deletions and Amplifications involving both critical regions at 17p13 and 19q13 will show one red and three or more green signals (1R3+G). Two single color red (R) and green (G) signals will identify the normal chromosomes 17 and 19 (2R2G).

	Normal Signal Pattern	Amp(19q13)	Del(17p13)	Amp(19q13), Del(17p13)
Expected Signals	2R2G	2R3+G	1R2G	1R3+G

References: Cremer F et al, 2005, Genes Chromosomes Cancer, 44; 194-203

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 formaldehyde 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.