

Kreatech™ FISH probes

Product Information Sheet

KBI-10503

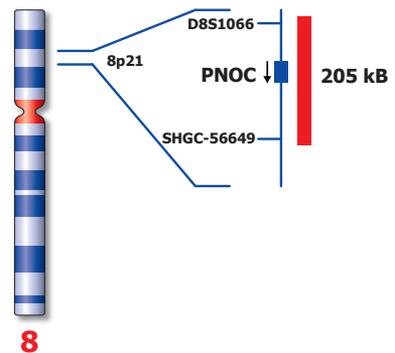
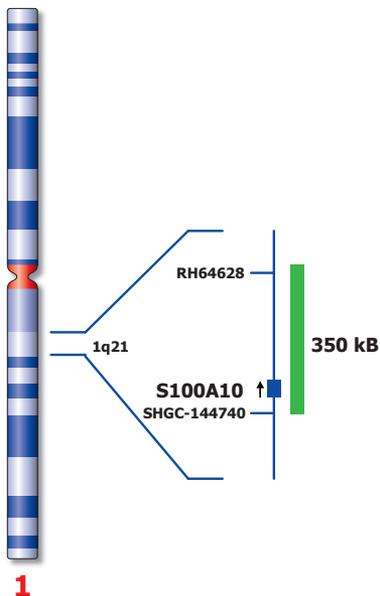
1q21 / 8p21



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Not to scale

Kreatech™ 1q21 / 8p21 FISH probe

Introduction: Segmental duplication of 1q12-21 and adjacent bands have been reported in Multiple Myeloma (MM). This aberration, together with others, is discussed to define a hyperdiploid subgroup in Multiple Myeloma patients. MM with gain of 1q was delineated as a subentity with significantly higher beta-2-microglobulin and lower hemoglobin levels, indicating a poor prognosis. Loss at 8p21 has been described in MM and may define a new subgroup in combination with the 1q21 amplification.

Intended use: The **1q21** specific FISH probe is optimized to detect copy numbers at 1q21. The **8p21** specific FISH region is optimized to detect copy numbers at 8p21.

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 **8p21** specific FISH probe is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **1q21** 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 **1q21 / 8p21** FISH probe is designed as a dual-color assay to detect deletions or amplifications at 1q21 and 8p21. Deletions involving the 8p21 region will show one red signal and two green signals for the 1q21 region (1R2G). Amplifications involving the 1q21 region will show three or more green signals and two red signals for the 8p21 region (2R3+G). Deletions and Amplifications involving both critical regions at 1q21 and 8p21 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 1 and 8 (2R2G).

	Normal Signal Pattern	Del(8p21)	Amp(1q21)	Del(8p21) Amp(1q21)
Expected Signals	2R2G	1R2G	2R3+G	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 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.