

Kreatech™ FISH probes

Product Information Sheet

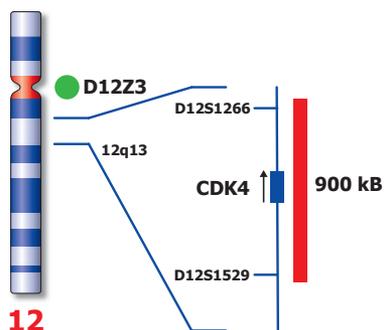
KBI-10725
CDK4 (12q13) / SE 12



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PI-KBI-10725_D1.1

Published March 2015



Not to scale

Kreatech™ CDK4 (12q13) / SE 12 FISH probe

Introduction: The chromosomal region **12q13-q15** is recurrently amplified in several types of cancer, especially in gliomas and sarcomas. Putative target genes located in this region include MDM2 and CDK4. Independent CDK4 amplifications have been described, suggesting two different amplified regions one including MDM2 (see KBI-10717), the other CDK4.

Intended use: The **CDK4 (12q13)** specific FISH robe is optimized to detect copy numbers of the CDK4 gene region at 12q13. The **Satellite Enumeration (SE) 12** FISH probe is included to facilitate chromosome identification.

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 **CDK4 (12q13)** gene region probe is direct-labeled with PlatinumBright™550.
Control region 2 (green): The **SE 12** 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 **CDK4 (12q13) / SE 12** FISH probe is designed as a dual-color assay to detect amplifications at 12q13. Amplifications involving the CDK4 gene region at 12q13 will show several red signals, while the control at the chromosome 12 centromere region will provide 2 signals. Two single color red (R) and green (G) signals will identify the normal chromosomes 12 (2R2G).

	Normal Signal Pattern	12q13 Amplification
Expected Signals	2R2G	3+R2G

References: Shimada et al, 2006, Hum Path 37(9) ; 1123-1129
 Kuhnen et al, 2002, Virchows Arch 441 ; 299-302

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.