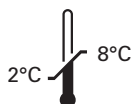


Kreatech™ FISH probes

Product Information Sheet

KBI-10706

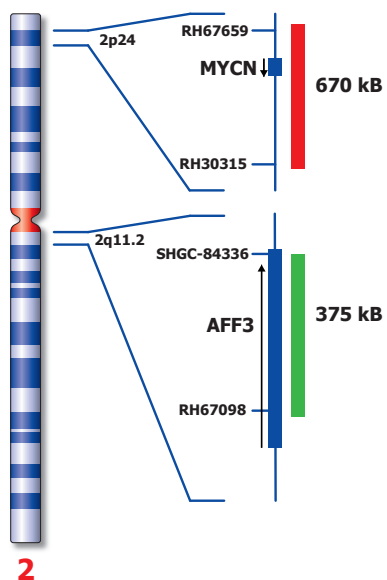
MYCN (2p24) / AFF3 (2q11)



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Not to scale

Kreatech™ MYCN (2p24) / AFF3 (2q11) FISH probe

Introduction: Amplification of MYCN occurs in about 25% of neuroblastoma primary tumors and is a reliable marker of aggressive clinical behavior. The amplification of the MYCN gene is frequently seen either in extrachromosomal double minutes or in homogeneously staining regions in chromosomes of aggressively growing neuroblastomas. MYC has an important part in the history of molecular biology. In clinical oncology this was the first example of using molecular genetic data prospectively to stratify patients to therapy.

Intended use: The **MYCN (2p24)** specific FISH probe is optimized to detect copy numbers of the MYCN gene region at region 2p24. The **AFF3** gene region FISH probe at 2q11 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 **MYCN (2p24)** specific FISH probe is direct-labeled with PlatinumBright™550.
Control region 2 (green): The **AFF3 (2q11)** 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 **MYCN (2p24) / AFF3 (2q11)** FISH probe is designed as a dual-color assay to detect amplification at 2p24. Amplification involving the MYCN gene region at 2p24 will show several red signals, while the control at the AFF3 (2q11) region will provide 2 signals. Signals often appear as homogeneously staining region or double minutes containing numerous MYCN signals.

	Normal Signal Pattern	Amp(2p24)
Expected Signals	2R2G	3+R2G

References: Ambros P et al, 2001, Med Pediatr Oncol, 36; 1-4
 INRG, preliminary report, ANC 2006
 Squire J et al, 1996, Mol.Diagn., 1; 281-289

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.