

Kreatech™ FISH probes

Product Information Sheet

KBI-10704

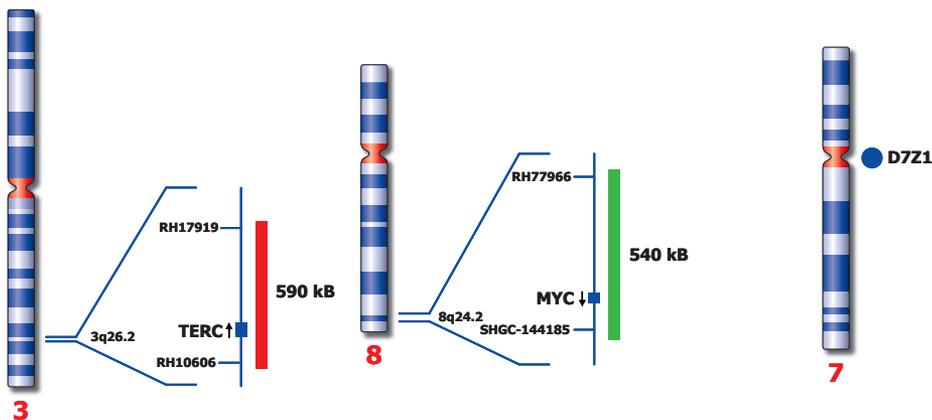
TERC (3q26) / MYC (8q24) / SE 7 Triple-Color



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Not to scale

Kreatech™ TERC (3q26) / MYC (8q24) / SE 7 Triple-Color FISH probe

Introduction:

Amplification of 3q is a frequently observed aberration in a variety of tumors. The TERC (RNA component of Telomerase) gene is a possible candidate cancer gene and is located within a critical region at 3q26. Amplification of MYC has been described in many types of tumors. Multiple copies of the gene may be evidenced in homogeneously staining chromosomal regions and in double minutes. Both sites, 3q26 and 8q24, are potential intergration sites for HPV (human papilloma virus) and have been described to be amplified in early stages of cervical cancer. Chromosome 7 is not reported to be involved in cervical cancer and is used as control probe for aneuploidy.

Intended use:

The **TERC (3q26)** specific FISH probe is optimized to detect copy numbers of the TERC gene region at region 3q26. The **MYC (8q24)** specific FISH probe is optimized to detect copy numbers of the MYC gene region at 8q24. The **Satellite Enumeration (SE) 7** specific FISH probe is included as aneuploidy control.

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 **TERC (3q26)** specific FISH probe is direct-labeled with PlatinumBright™550.

Critical region 2 (green):

The **MYC (8q24)** specific FISH probe is direct-labeled with PlatinumBright™495.

Control region 3 (blue):

The **SE 7** FISH probe is direct-labeled with PlatinumBright™415.

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 **TERC (3q26) / MYC (8q24) / SE 7 Triple-Color** FISH probe is designed as a Triple-Color assay to detect amplifications at 3q26 and 8q24. Amplifications involving the TERC gene region at 3q26 will show three or more red signals and two signals for MYC at 8q24 and the 7cen probe. Amplifications involving the MYC gene region at 8q24 will show three or more green signals and two signals for TERC at 3q26 and the 7cen probe. Amplifications involving both the TERC region at 3q26 and MYC region at 8q24 will show three or more red and green signals and two signals for the 7cen probe in blue. Two single color red (R), green (G), and blue (B) signals will identify the normal chromosomes 3, 8, and 7 (2R2G2B).

	Normal Signal Pattern	Amp(3q26)	Amp(8q24)	Amp(3q26;8q24)
Expected Signals	2R2G2B	3+R2G2B	2R3+G2B	3+R3+G2B

References:

Soder AI et al, 1997, Oncogene, 14; 1013-1021
Hopman A et al, 2006, J of Pathol, 210; 412-419
Heselmeyer-Haddad K et al, 2005, Am J Pathol, 166; 1229-1238

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.