

Kreatech™ FISH probes

Product Information Sheet

KBI-10011

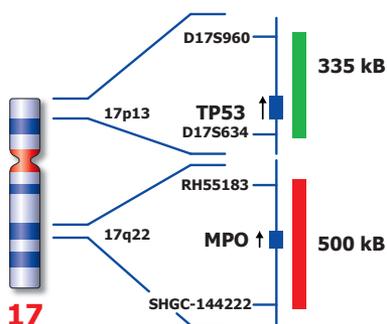
TP53 (17p13) / MPO (17q22) "ISO 17q"



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Not to scale

Kreatech™ TP53 (17p13) / MPO (17q22) “ISO 17q” FISH probe

Introduction: Isochromosome 17q, or "Iso(17q)," is the most common isochromosome characterizing human neoplasia and has been described as both a primary and a secondary abnormality. Loss of the tumor-suppressor gene TP53, located at 17p13, has been suggested to be a critical outcome resulting from i(17q) formation. Gain of chromosome segment 17q21-qter is also of great biological and clinical importance in neuroblastoma as significant predictor of adverse outcome.

Intended use: The **TP53 (17p13) / MPO (17q22)** specific FISH probe is optimized to detect copy numbers of the TP53 gene region at 17p13 and MPO gene region at 17q22.

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 **MPO (17q22)** specific FISH probe is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **TP53 (17p13)** 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 **TP53 (17p13) / MPO (17q22)** FISH probe is designed as a dual-color assay to detect deletions and amplifications at 17p13 and 17q22. Deletions involving the TP53 gene region will show one green signal and two red signals at the MPO (17q22) region (2R1G). Gain of 17q involving the MPO gene region at 17q22 will show three or more red signals and two green signals at the TP53 (17p13) region. In cases with an ISO 17q chromosome the signal pattern will show three red signals for MPO (17q22) and one signal for TP53 at 17p13. Two single color red (R) and green (G) signals will identify the normal chromosomes 17 (2R2G).

	Normal Signal Pattern	Del(17p13)	Amp (17q22)	Iso 17q
Expected Signals	2R2G	2R1G	3+R2G	3R1G

References: Scheurle WG et al, 1999, Genes Chromosomes Cancer, 25; 230-240
 Bown N, 1999, N Engl J Med., 340; 1954-1961

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.