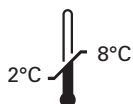


# Kreatech™ FISH probes

## Product Information Sheet

KBI-10710

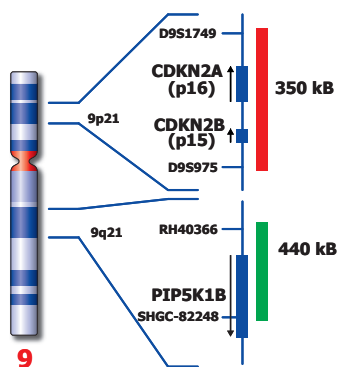
CDKN2A (9p21) / 9q21 (tissue)



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Not to scale

## Kreatech™ CDKN2A (9p21) / 9q21 (tissue) FISH probe - Optimized for Tissue Hybridization -

**Introduction:** Two genes, CDKN2A (also known as p16, INK4A, or MTS1) and CDKN2B (also described as p15, INK4B or MTS2), are found in tandem at chromosome 9p21. Molecular genetic studies have revealed that deletion of the p16 and p15 genes occurs frequently in bladder cancer and other solid tumors, but also in t-ALL and in about 15% of Non-Hodgkin Lymphomas.

**Intended use:** The **CDKN2A (9p21)** specific FISH probe is optimized to detect copy numbers of the CDKN2A gene region at region 9p21. The **9q21** specific region FISH probe is included to facilitate chromosome identification.

The probe is especially developed for use on paraffin sections. For applications on metaphase/interphase spreads, blood smears and bone marrow cells it is advised to use KBI-10402.

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](http://www.LeicaBiosystems.com) and look for Kits & reagents)

**Critical region 1 (red):** The **CDKN2A (9p21)** specific FISH probe is direct-labeled with PlatinumBright™550.  
**Control region 2 (green):** The **9q21** FISH probe gene region 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 **CDKN2A (9p21) /9q21 (tissue)** FISH probe is designed as a dual-color assay to detect deletions at 9p21. Deletions involving the CDKN2A gene region at 9p21 will show one red signal, while the control at the chromosome 9q12 region will provide 2 green signals in hemizygous deletions. No red signal, but 2 green signals for 9q12 will be visible in homozygous deletions of 9p21. Two single color red (R) and green (G) signals will identify the normal chromosomes 9 (2R2G).

	Normal Signal Pattern	Del(9p21)
Expected Signals	2R2G	0-1R2G

**References:** Dreyling et al, 1995, Blood, 86: 1931-1938.  
Southgate et al, 1995, Br J Cancer, 72: 1214-1218.

**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](http://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](http://www.LeicaBiosystems.com) or +31 20 6919181 or via e-mail: [kreatech-support@leicabiosystems.com](mailto: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](mailto:purchase.orders@leica-microsystems.com).