

# Kreatech™ FISH probes

## Product Information Sheet

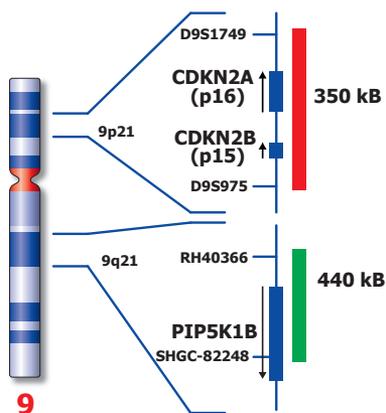
KBI-10402  
CDKN2A (9p21) / 9q21



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Not to scale

## Kreatech™ CDKN2A (9p21) / 9q21 FISH probe

**Introduction:** Two genes, CDKN2A (previously known as p16, INK4A, or MTS1) and CDKN2B (previously known as p15, INK4B or MTS2), are found in tandem on chromosome 9p21. Molecular genetic studies have revealed that deletion of the CDKN2A and CDKN2B 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 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](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** 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 9q21 region will provide 2 green signals in hemizygous deletions. No red signal, but 2 green signals for 9q21 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).