

# Kreatech™ FISH probes

## Product Information Sheet

KI-40103

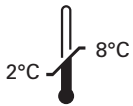
HIRA (22q11) / 22q13 (SHANK3)

100 µl

**DANGER**



**FORMAMIDE**



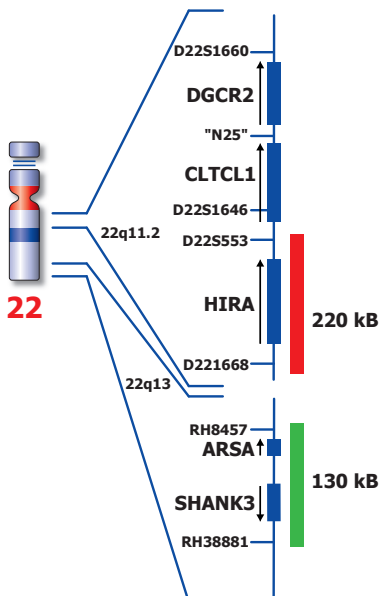
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**RUO - Research Use Only**

Not for use in diagnostic procedures

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Not to scale

KI-40103

## Kreatech™ HIRA (22q11) / 22q13 (SHANK3) FISH probe

**Introduction:** The **HIRA (22q11)** region probe is optimized to detect the HIRA (TUPLE1, DGCR1) gene region at 22q11. The **22q13 (SHANK3)** FISH probe is optimized to detect the SHANK3 gene region at 22q13.

**Critical region 1 (red):** The **HIRA (22q11)** specific FISH probe is direct-labeled with PlatinumBright™550.  
**Critical region 2 (green):** The **22q13 (SHANK3)** 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.**

**Patterns:** The **HIRA (22q11) / 22q13 (SHANK3)** FISH probe is designed as a dual-color assay to detect deletions at 22q11 and 22q13. Deletions involving the HIRA region will show one red signal and two green signals (1R2G). Deletions involving the 22q13 (SHANK3) region will show one green signal and two red signals (2R1G). Two single color red and green signals will identify the normal chromosomes 22 (2R2G).

	Normal Signal Pattern	Del(22q11) HIRA	Del(22q13) SHANK3
Expected Signals	2R2G	1R2G	2R1G

**References:** DiGeorge, A. M. 1968, Birth Defects Orig. Art. Ser. IV(1): 116-121  
Mattei, M.-G et al, 1994, Genomics 23: 717-718  
Roberts, C, 1997, Hum. Molec. Genet. 6; 237-245  
Scambler, P, 2000, Human Molecular Genetics, 9; 2421-2426  
Wilson, et al, 2003, J Med Genet 40; 575-584  
Luciani, et al, 2003, J Med Genet 40; 690-696

**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 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/service-support/technical-support/](http://www.LeicaBiosystems.com/service-support/technical-support/) or toll free at 800-248-0123 or via e-mail: [kreatech-support@leicabiosystems.com](mailto:kreatech-support@leicabiosystems.com).

**CUSTOMER SERVICE** Kreatech probes may be ordered through Leica Customer Service toll free at 800-248-0123 or order via e-mail: [purchase.orders@leica-microsystems.com](mailto:purchase.orders@leica-microsystems.com).