

# Kreatech™ FISH probes

## Product Information Sheet

KI-40008

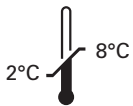
RCAN1 (21q22), SE X, Y

200 µl

**DANGER**



**FORMAMIDE**



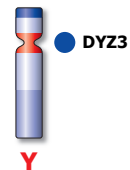
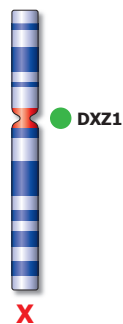
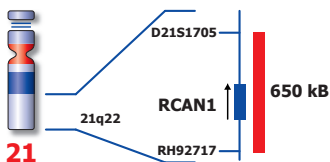
**Kreatech Biotechnology B.V.**  
Vlierweg 20  
1032 LG Amsterdam  
The Netherlands  
[www.LeicaBiosystems.com](http://www.LeicaBiosystems.com)

**RUO - Research Use Only**

Not for use in diagnostic procedures

PI-KI-40008\_D2.2

Published Oct 2015



Not to scale

KI-40008

## Kreatech™ RCAN1 (21q22), SE X, Y FISH probe

**Introduction:**

The **Chromosome 21 specific** region FISH probe is optimized to detect chromosome 21 at 21q22 on uncultured amniotic cells.

The **Chromosome X specific** Satellite Enumeration (SE) FISH probe (DXZ1) is optimized to detect Chromosome X at Xp11-Xq11 on uncultured amniotic cells.

The **Chromosome Y specific** Satellite Enumeration (SE) FISH probe (DYZ3) is optimized to detect Chromosome Y at Yp11-Yq11 on uncultured amniotic cells.

- Critical region 1 (red):**
- Critical region 2 (green):**
- Critical region 3 (blue):**

The **21q specific** FISH probe is direct-labeled with PlatinumBright™550.

The **SE X** FISH probe is direct-labeled with PlatinumBright™495.

The **SE Y** 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.**

**Patterns:**

The **RCAN1 (21q22), SE X, Y** FISH probe is designed as a triple-color assay to detect aneuploidies of chromosome 21, X, and Y in a single hybridization assay. In females two single color red (R) and green (G) signals will identify the normal chromosomes 21 and X (2R2G). In males two single colors red (R) and one green (G) and one Blue (B) signals will identify the normal chromosomes 21, X, and Y (2R1G1B).

Expected Signals	Female	Male
Normal	2R2G	2R1G1B
Trisomy 21	3R2G	3R1G1B
XO	2R1G	-
XXX	2R3-5G	-
XXY		2R2G1B 2R3-4G1B 2R1G1B/2R2G1B in mosaics

**References:**

Korenberg J. et al, 1994, Proc. Nat. Acad. Sci. 91; 4997-5001

Spathas D et al, 1994, Prenat Diagn. 14(11); 1049-1054

Tepperberg et al, 2001, Prenat Diagn 21(4); 293-301

**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).