Kreatech™ FISH probes

Product Information Sheet

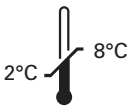
KI-40115

STS (Xp22) / KAL1 (Xp22) / SE X Triple-Color

100 µl

DANGER

FORMAMIDE



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RUO - Research Use Only

Not for use in diagnostic procedures

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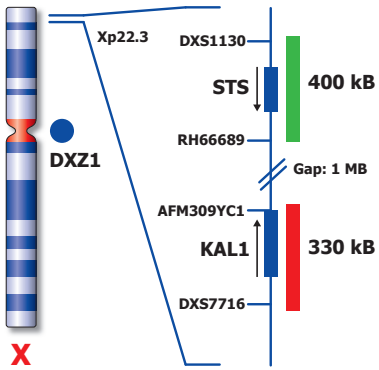

Not to scale

KI-40115

Kreatech™ STS (Xp22) / KAL1 (Xp22) / SE X Triple-Color FISH probe

Introduction: The **STS (Xp22)** region probe is optimized to detect the STS gene region at Xp22.
The **KAL1 (Xp22)** region probe is optimized to detect the KAL1 gene region at Xp22.
The **Satellite Enumeration (SE) X** FISH probe is included to facilitate chromosome identification.

Critical region 1 (red): The **KAL1 (Xp22)** specific FISH probe is direct-labeled with Platinum*Bright*™550.
Critical region 2 (green): The **STS (Xp22)** specific FISH probe is direct-labeled with Platinum*Bright*™495.
Control region (blue): The **SE X** specific FISH probe is direct-labeled with Platinum*Bright*™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 **STS (Xp22) / KAL1 (Xp22) / SE X Triple-Color** FISH probe is designed as a triple-color assay to detect deletions at two different regions at Xp22. Deletions involving the KAL1 region will show one red signal, two green, and two blue signals for the STS and SE X control regions (1R2G2B). Deletions involving the STS region will show one green signal, and two red and two blue signals for the KAL1 and SE X control regions (2R1G2B). Deletions involving both the KAL1 and STS region will show one green and one red signal and two blue signals for the SE X control region (1R1G2B).
Two single color red, green and blue signals will identify the normal chromosomes X (2R2G2B) in females or (1R1G1B) in males.

	Normal Signal Pattern	Del KAL1 (Xp22)	Del STS (Xp22)	Del STS and KAL1
Expected Signals In females	2R2G2B	1R2G2B	2R1G2B	1R1G2B
Expected Signals In males*	1R1G1B	1G1B	1R1B	1B

Note*: Both genes, STS and KAL1, have homologous non-functional pseudogene sequences at Yp (see Meroni et al, 1996). Very weak cross-hybridization of the Xp22 probes with Yp could be visible. It is recommended to use Metaphase chromosomes for this analysis.

References:
Alperin et al, 1997, J. Biol. Chem 272; 20756-20763.
Meroni et al, 1996, Hum. Mol. Genet. 5; 423-431

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 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/ or toll free at 800-248-0123 or via e-mail: 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.