

Kreatech™ FISH probes

Product Information Sheet

KBI-40113

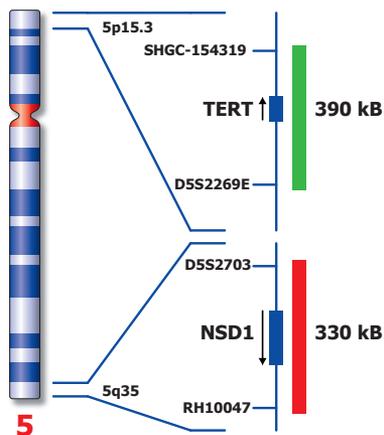
NSD1 (5q35) / TERT (5p15)



Kreatech Biotechnology B.V.
Vierweg 20
1032 LG Amsterdam
The Netherlands
www.LeicaBiosystems.com

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Not to scale

Kreatech™ NSD1 (5q35) / TERT (5p15) FISH probe

Introduction: NSD1 (previously known as ARA267, KMT3B, STO) haploinsufficiency was determined to be the major cause of Sotos syndrome, an overgrowth disorder also characterized clinically by mental retardation, specific craniofacial features, and advanced bone age. While 50% of Sotos patients in Asia are showing a chromosomal microdeletion, only 9% deletion cases are observed in the affected European population.

Intended use: The **NSD1 (5q35)** region probe is optimized to detect copy numbers of the NSD1 gene region at 5q35. The **TERT** region specific FISH probe at 5p15 is included as control probe.

Critical region 1 (red): The **NSD1 (5q35)** specific FISH probe is direct-labeled with PlatinumBright™550.
Control region 2 (green): The **TERT (5p15)** 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.

Interpretation: The **NSD1 (5q35) / TERT (5p15)** FISH probe is designed as a dual-color assay to detect deletions at 5q35. Deletions involving the NSD1 region will show one red signal and two green signals at the TERT control region (1R2G). Two single color red (R) and green (G) signals will identify the normal chromosomes 5 (2R2G).

	Normal Signal Pattern	Del(5q35)
Expected Signals	2R2G	1R2G

References: Douglas et al, 2003, Am. J. Hum. Genet. 72; 132–143.
 Rio et al, 2003, J. Med. Genet. 40; 436-440.

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 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 or +31 20 6919181 or via e-mail: 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.