

Kreatech™ FISH probes

Product Information Sheet

KBI-45107

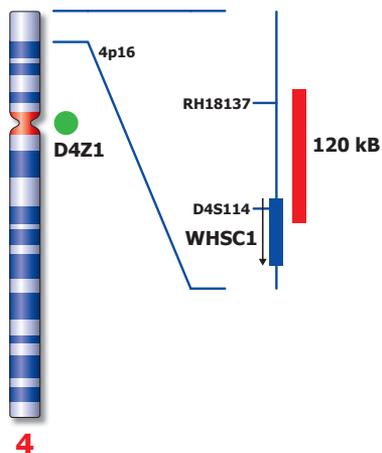
Wolf-Hirschhorn WHSC1 (4p16) / SE 4



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Not to scale

Kreatech™ Wolf-Hirschhorn WHSC1 (4p16) / SE 4 FISH probe

Introduction: Wolf-Hirschhorn syndrome is a multiple malformation syndrome characterized by mental and developmental defects resulting from the absence of a segment of one chromosome 4 short arm (4p16.3). A minimal critical region has been limited to a 165 kb region defined by the loci D4S166 and D4S3327, but the deletion is described to extent more telomeric for the full Wolf-Hirschhorn phenotype 1.

Intended use: The **Wolf-Hirschhorn WHSC1** region probe is optimized to detect copy numbers of the WHSC1 (previously known as MMSET, NSD2) gene region at 4p16. The **Satellite Enumeration (SE) 4** 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 and look for Kits & reagents)

Critical region 1 (red): The **Wolf-Hirschhorn WHSC1** specific FISH probe is direct-labeled with PlatinumBright™550.

Control region 2 (green): The **SE 4** 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 **WHSC1 (4p16) / SE 4** FISH probe is designed as a dual-color assay to detect deletions at 4p16. Deletions involving the WHSC1 region will show one red signal and two green signals at the chromosome 4 centromere control region (1R2G). Two single color red and green signals will identify the normal chromosomes 4 (2R2G).

	Normal Signal Pattern	Del(4p16)
Expected Signals	2R2G	1R2G

References: Wright T et al, 1997, Hum Mol Genet; 6(2); 317-24
Zollino et al, 2003, Am J Hum Genet. March; 72(3); 590–597

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 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.