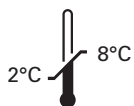


Kreatech™ FISH probes

Product Information Sheet

KBI-40106

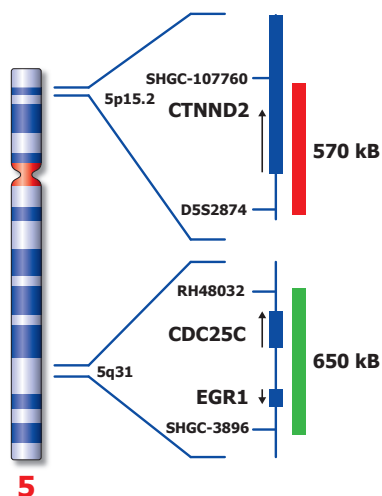
Cri-Du-Chat CTNND2 (5p15) / 5q31



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

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Not to scale

Kreatech™ Cri-Du-Chat CTNND2 (5p15) / 5q31 FISH probe

Introduction: Cri-du-chat syndrome is a hereditary congenital syndrome associated with deletion of part of the short arm of chromosome 5. The deletions can vary in size from extremely small and involving only band 5p15.2 to the entire short arm. A critical chromosomal region responsible for the clinical features, including growth and mental retardation, microcephaly, hypertelorism, epicanthal fold is located at 5p15.2, while a second region involved in the high-pitched cry is mapped to proximal 5p15.3.

Intended use: The **CTNND2** (previously known as NPRAP, GT24) region probe is optimized to detect copy numbers of the CTNND2 gene region in the Cri-Du-Chat critical region at 5p15. The **5q31** specific FISH probe at 5q31 is included as a control probe.

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 **CTNND2** specific FISH probe is direct-labeled with PlatinumBright™550
Control region 2 (green): The **5q31** 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 **CTNND2 (5p15) / 5q31** FISH probe is designed as a dual-color assay to detect deletions at 5p15.2. Deletions involving the CTNND2 (5p15) region will show one red signal and two green signals at the 5q31 control region (1R2G). Two single color red and green signals will identify the normal chromosomes 5 (2R2G).

	Normal Signal Pattern	Del(5p15)
Expected Signals	2R2G	1R2G

References: Overhauser, J et al., 1994, Hum. Molec. Genet. 3: 247-252.
 Medina, M, 2000, Genomics, 63: 157-164.

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.