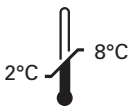
Kreatech™ FISH probes

Product Information Sheet

KBI-20033

Acro-P-Arms NOR

IVD



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Not to scale

KBI-20033

Kreatech™ Acro-P-Arms NOR FISH Probe

Introduction:

The NOR (Nucleolar Organizer Region) is located on every p-arm of the human acrocentric chromosomes. Enlargement of the acrocentric p-arms can be caused by an unusual variant or a translocation event. NOR stain of the p-arms is useful to detect such a p-arm variant. In the classification of small supernumerary marker chromosomes (SMCs) the Acro-P-Arms NOR probe can detect the origin of DNA, in which about 80% will turn out to be derived from the acrocentric chromosomes.

Intended use:

The **Acro-P-Arms NOR** FISH probe is optimized to detect the short (p) arm of all acrocentric human chromosomes. The probe is intended to be used on metaphase/interphase spreads.

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 and reagents)

Reagent:

The Kreatech **Acro-P-Arms NOR** probe is a direct-labeled DNA probe provided in a 5x concentrated format in a choice of the following fluorophores:

Platinum*Bright*™550	Red
Platinum*Bright*™495	Green
Platinum*Bright*™415	Blue

For FISH the probes need to be diluted with the supplied hybridization buffer (FHB). For hybridization use 2 parts of probe + 8 parts of FHB. To mix with Satellite Enumeration Probes replace 2 parts of FHB with 2 parts of another probe.

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 **Acro-P-Arms NOR** probe is designed to detect the short (p) arm of all human acrocentric chromosomes. Because the NOR is the region around which the nucleus forms after mitosis, the NOR staining in nuclei may appear as two or more stained regions. In metaphase nuclei the Acro-P-Arms NOR probe will stain the p-arm of the 10 acrocentric chromosomes present, due to normal variation these may appear different in size and signal strength for each acrocentric chromosome. For identification of translocations involving the short arm of any acrocentric chromosome, it is recommended to combine the Acro-P-Arms NOR probe with SE13/21, SE14/22 and/or SE15 (KBI-20027, KBI-20028 , KBI-20015).

References:

Starke H et al., 2003, Hum Genet, 114; 51-67
Starke H et al., 2005, J Histochem Cytochem, 53, 359-360

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.