

# Kreatech™ FISH probes

## Product Information Sheet

KBI-10714

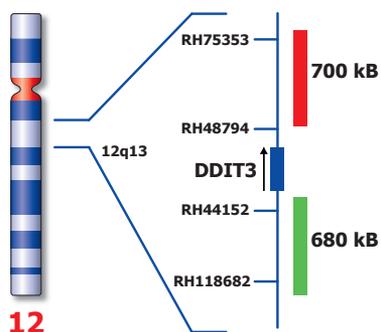
DDIT3 (12q13) Break



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Not to scale

## Kreatech™ DDIT3 (12q13) Break FISH probe

### Introduction:

A chromosomal aberration involving DDIT3 (previously known as CHOP) (12q13) is cytogenetically characteristic for myxoid liposarcomas. The translocation is usually observed as t(12;16)(q13;p11) with FUS at 16p11 as translocation partner, but other variants, such as translocation to EWSR1 (22q12), are observed as well. A break or split probe for DDIT3 is best used to analyze translocation of the DDIT3 gene on formalin fixed paraffin embedded tissue for routine clinical diagnosis.

### Intended use:

The **DDIT3 (12q13) Break** FISH probe is optimized to detect translocations involving the DDIT3 gene region at 12q13 in a dual-color, split assay on FFPE tissue sections.

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](http://www.LeicaBiosystems.com) and look for Kits & reagents)

### Critical region 1 (red):

The **proximal DDIT3** gene region probe is direct-labeled with PlatinumBright™550.

### Critical region 2 (green):

The **distal DDIT3** gene region 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 **DDIT3 (12q13) Break** FISH probe is designed as a dual-color split probe for translocations at 12q13. A break is defined when a red/green or yellow fusion signal (F) splits into separate red and green signals. Only red and green signals which are more than one signal diameter apart from each other are counted as a break. Co-localized red/green or yellow signals identify the normal chromosome(s) 12.

Signal patterns other than those described above may indicate variant translocations or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	12q13 Split
Expected Signals	2F	1F1R1G

### References:

Panagopoulos et al, 1994, Cancer Res. 54; 6500-6503  
Antonescu et al, 2000, J Mol Diagn. 2; 132-138.

**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](http://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](http://www.LeicaBiosystems.com) or +31 20 6919181 or via e-mail: [kreatech-support@leicabiosystems.com](mailto: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](mailto:purchase.orders@leica-microsystems.com).