Kreatech™ FISH probes

Product Information Sheet

KBI-12754

FGFR1 (8p11) / SE 8

IVD

DANGER

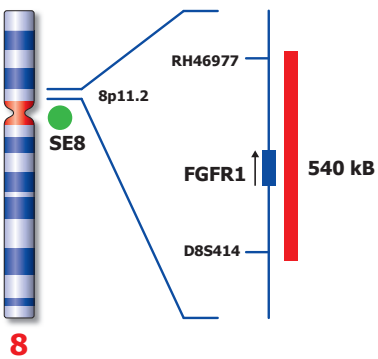
FORMAMIDE

2°C 8°C

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

PI-KBI-12754_D1.1

Published March 2015



Not to scale

KBI-12754

Kreatech™ FGFR1 (8p11) / SE 8 FISH Probe

Introduction:

Amplification of the fibroblast growth factor receptor type 1 gene (FGFR1) has been observed in numerous cancer types including lung cancer (especially squamous cell carcinoma) and breast cancer. With the development of new therapeutic strategies, FGFR1 amplification could act as a valuable biomarker for R&D and provide an attractive tool for clinical stratification.

Intended use:

The **FGFR1 (8p11) / SE 8** FISH probe is optimized to detect amplification involving the FGFR1 gene region at 8p11 in a dual-color 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 and look for Kits & reagents)

Critical region 1 (red): The **FGFR1 (8p11)** gene region probe is direct-labeled with PlatinumBright™550.
Critical region 2 (green): The **SE 8** control probe is direct-labeled with PlatinumBright495.

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 **FGFR1 (8p11) / SE8** FISH probe is designed as an amplification probe to detect amplification at 8p11. Amplification of the 8p11 region will result in 3 or more red signals and 2 green signals (3+R2G). A break in the FGFR1 gene will result in 3 red signals and 2 green signals (3R2G). Two red and 2 green identify the normal chromosomes 8 (2R2G). Signal patterns other than those described above may indicate variant translocations, deletions or amplifications. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	8p11 Amplification	8p11 Break
Expected Signals	2R2G	3+R2G	3R2G

References:

Weiss et al., 2010, Sci. Transl. Med. 2(62): 62ra93
Brooks et al., 2012, Clin. Cancer Res. 18(7): 1855-62

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.