Cat Nr/REF: KBI-10602

English

For professional use only

Poseidon™ Repeat Free™ FGFR3/IGH t(4;14) Fusion probe

Introduction:

FGFR3 (tyrosine kinase receptor) and MMSET (Multiple Myeloma SET domain) are involved in translocations at 4p16. Both are fused with IGH in t(4;14) translocations. The translocation generates 2 fusion genes, IGH-MMSET on der(4) and FGFR3-IGH on der(14). The t(4;14) translocation predicts a rather bad prognosis in Multiple Myeloma.

Intended use:

The FGFR3/IGH t(4;14)(p16;q32) specific DNA Probe is optimized to detect the reciprocal translocation t(4;14) in a dual-color, dual-fusion assay on metaphase/interphase spreads, blood smears and bone marrow cells.

The probe is recommended to be used in combination with a Poseidon FISH Kit providing necessary reagents to perform FISH (KBI-60002, KBI-60003 or KBI-60001) for optimal results.

Critical region 1 (red):

The **IGH (14q32)** specific DNA probe is direct-labeled with Platinum*Bright*550.

Critical region 2 (green):

The **FGFR3 (4p16)** control DNA probe is direct-labeled with Platinum*Bright*495.

Reagent:

Poseidon 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 Poseidon FISH protocol.

Poseidon Repeat Free probes do not contain Cot-1 DNA. Hybridization efficiency is therefore increased and background, due to unspecific binding, is highly reduced.

Interpretation:

The **FGFR3/IGH t(4;14)** probe is designed as a dual-fusion probe to detect both rearranged chromosomes der(4) and der(14) by two co-localized red/green or yellow fusion signals (F). Single color red (R) and green (G) signals will identify the normal chromosomes 14 and 4 respectively.

Signal patterns other than those described above may indicate variant translocations, deletions on der(4) or der(14) or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	t(4;14)
Expected Signals	2R2G	2F1R1G

References:

Richelda, R et L, 1997, Blood, 90; 4062-4070
Finelli P et al, 1999, Blood, 94; 724-732

POSEIDON™
REPEAT-FREE™ FISH PROBES

Application Manual

KBI-10602
ON FGFR3/IGH t(4;14) Fusion

IVD
for EU only

CE

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2°C 8°C long term storage

KREATECH DIAGNOSTICS

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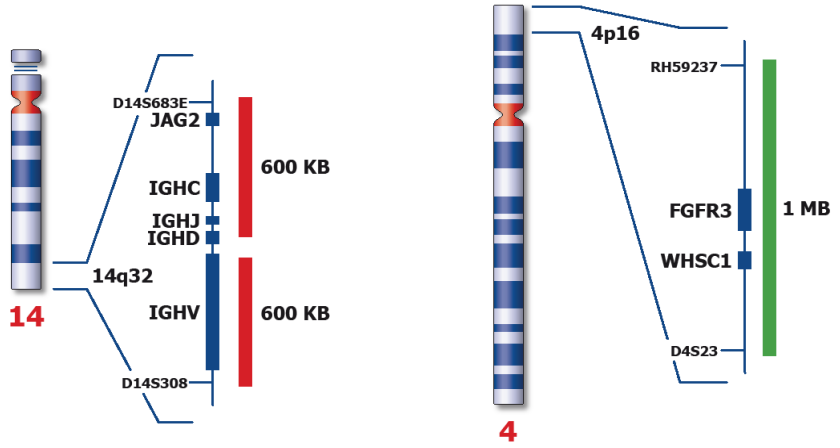

Not to scale

Application manual