

Poseidon™ Repeat Free™ C-MYC/IGH t(8;14) Fusion probe

Introduction: Burkitt's lymphoma cells exhibit the reciprocal balanced chromosomal translocation t(8;14) in 75% of patients. On the molecular level, the t(8;14) juxtaposes the C-MYC gene in 8q24 next to the IgH locus in 14q32, resulting in overexpression of the transcription factor c-Myc.

Intended use: The **C-MYC/IGH t(8;14)(q24;q32) specific** DNA Probe is optimized to detect the reciprocal translocation t(8;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 PlatinumBright550.

Critical region 2 (green): The **C-MYC (8q24)** control DNA probe is direct-labeled with PlatinumBright495.

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 **C-MYC/IGH t(8;14)** probe is designed as a dual-fusion probe to detect both rearranged chromosomes der(8) 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 8 respectively.

Signal patterns other than those described above may indicate variant translocations, deletions on der(8) or der(14) or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

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|------------------|-----------------------|---------|
| | Normal Signal Pattern | t(8;14) |
| Expected Signals | 2R2G | 2F1R1G |

References: Veronese ML et al, 1995, Blood, 85; 2132-2138
Siebert R et al, 1998, Blood, 91; 984-990

AM-KBI-10603_R1.1.doc




Application Manual

KBI-10603
ON MYC/IGH t(8;14) Fusion

IVD
for EU only

CE



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