

## Poseidon™ Repeat Free™ BCL1/IGH t(11;14) Fusion probe

**Introduction:** The chromosomal translocation t(11;14)(q13;q32) is the hallmark of mantle cell lymphoma (MCL) in which it can be detected cytogenetically in about 75% of cases. The t(11;14) translocation juxtaposes the bcl-1 locus in chromosome band 11q13 next to the IgH locus in chromosome band 14q32 and thus leads to deregulation of the cell cycle regulatory protein cyclin D1 (CCND1).

**Note:** This probe is not optimal for use in Multiple Myeloma as breakpoint regions are different. For Multiple Myeloma the MYEOV/IGH t(11;14) probe is recommended (Cat# KB-10605).

**Intended use:** The BCL1/IGH t(11;14)(q13;q32) specific DNA Probe is optimized to detect the reciprocal translocation t(11;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 BCL1 (11q13) 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.

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

**Interpretation:** The BCL1/IGH t(11;14) probe is designed as a dual-fusion probe to detect both rearranged chromosomes der(11) 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 11 respectively.

Signal patterns other than those described above may indicate variant translocations, deletions on der(11) 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(11;14)
Expected Signals	2R2G	2F1R1G

**References:** Vaandrager et al, 1996, Blood 88 (4); 1177-1182  
Siebert, R. et al, 1998, Ann. Onc., 9; 519-526

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**POSEIDON™**  
REPEAT-FREE™ FISH PROBES



## Application Manual

KBI-10604

ON BCL1/IGH t(11;14) Fusion



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