

## Poseidon™ Repeat Free™ DLEU (13q14) & 13qter Control probe

**Introduction:** Deletion at 13q involving the band q14 occurs frequently in B-cell chronic lymphocytic leukaemia (CLL), being detectable in 8 - 10% of patients by conventional cytogenetics and up to 40 - 50% of patients by FISH. This deletion is also reported from non-Hodgkin's lymphoma (NHL), including both low grade and aggressive lymphoma, and as a common genetic lesion in multiple myeloma. A minimal critical region has been shown to lie between the RB1 gene and the marker D13S25 containing DLEU1, DLEU2, and RFP2 genes.

**Intended use:** The DLEU (13q14) specific DNA Probe is optimized to detect copy numbers of the DLEU gene region at 13q14. The 13qter (13q34) region is included to facilitate chromosome identification.

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 DLEU (13q14) specific DNA probe is direct-labeled with PlatinumBright550.

**Control region 2 (green):** The 13qter 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 DLEU (13q14) probe is designed as a dual-color assay to detect deletions at 13q14 by lack of one red signal, while the control at 13q34 will provide 2 signals (1R2G). Two single color red (R) and green (G) signals will identify the normal chromosomes 17 (2R2G).

	Normal Signal Pattern	Del(13q14)	Del (13q14-13q34)
Expected Signals	2R2G	1R2G	1R1G

**Note:** In CLL patients also Nullosomie for 13q14 has been observed. For this probe a signal pattern of two green signals (2G) only would be observed.

**References:** Stilgenbauer S et al., 1998, Oncogene, 16; 1891 – 1897  
 Wolf S et al, 2001, Hum. Molec. Genet., 10; 1275-1285  
 Elnenaï M et al., 2003, Genes Chromosomes Cancer, 36; 99 – 106



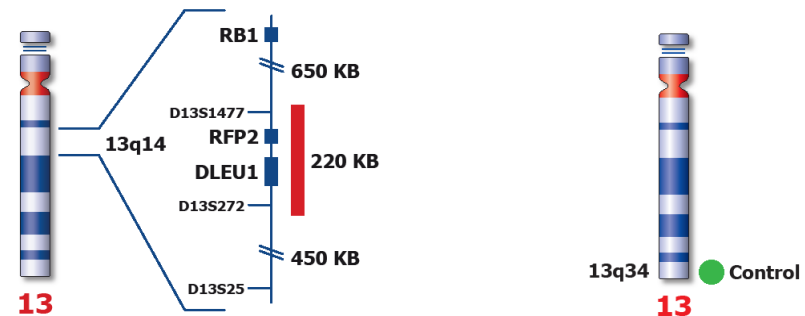
## Application Manual

KBI-10102  
 ON DLEU (13q14) / 13qter



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Application manual