

Poseidon™ Repeat Free™ MM 11q23 & DLEU (13q14) Probe

Introduction: Deletion at 13q involving the band q14 occurs frequently 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. Amplification of 11q involving band 11q23 is reported in Multiple Myeloma patients and belongs to the group of aberrations defining the hyperdiploid subgroup.

Intended use: The **11q23** specific DNA Probe is optimized to detect copy numbers at 11q23. The **DLEU (13q14)** specific DNA region is optimized to detect copy numbers of the DLEU gene region at 13q14.

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.

Critical region 2 (green): The **11q23** specific 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 11q23 & DLEU (13q14) probe is designed as a dual-color assay to detect deletions or amplifications at 11q23 and 13q14. Deletions involving the 13q14 region will show one red signal and two green signals for the 11q23 region (1R2G). Amplification involving the 11q23 region will show three or more green signal and two red signals for the 13q14 region (2R3+G). Deletion and Amplification involving both critical regions at 13q14 and 11q23 will show one red and three or more green signals (1R3+G). Two single color red (R) and green (G) signals will identify the normal chromosomes 13 and 11 (2R2G).

	Normal Signal Pattern	Del(13q14)	Amp(11q23)	Del (13q14) Amp(11q23)
Expected Signals	2R2G	1R2G	2R3G	1R3G

Note: In CLL patients also Nullosomie for 13q14 may occur. Using this probe a signal pattern of two green signals (2G) will be observed.

References: Cremer F et al, 2005, Genes Chromosomes Cancer, 44; 194-203

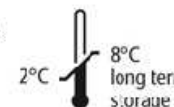
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Application Manual

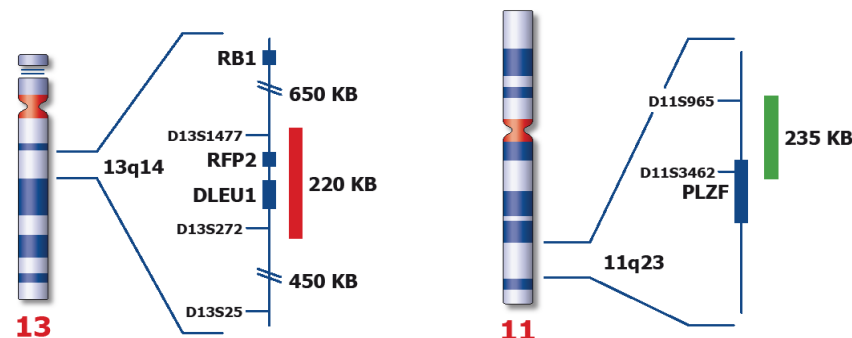
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ON MM 11q23 / DLEU (13q14)



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Application manual