

Poseidon™ Repeat Free™ 7q- (7q22 & 7q35) Probe

Introduction: Deletions of the long arm of chromosome 7 (7q-) is a common abnormality in MDS and AML. Two commonly deleted regions have been identified; one within band 7q22 flanked by markers D7S1503 and D7S1841, the second is located at distal 7q35 to 7q36. Although both regions are deleted in the majority of 7q- patients in some cases the deletion is restricted either to the 7q22 or 7q35 region.

Intended use: The 7q- specific DNA Probe is optimized to detect copy number of 7q at 7q22 and at 7q35 simultaneously in a dual-color assay.

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 7q- (7q35) specific DNA probe is direct-labeled with PlatinumBright550.

Critical region 2 (green): The 7q- (7q22) 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 7q- (7q22 & 7q35) probe is designed as a dual-color assay to detect deletions at 7q22 and 7q35. Deletions involving both critical regions at 7q22 and 7q35 will show one red and one green signal only (1R1G). Deletions involving the region at 7q35 only will show one red signal and two green signals for the region at 7q22 (1R2G). Deletions involving the region at 7q22 only will show one green signal and two red signals for the region at 7q35 (2R1G). Two single color red (R) and green (G) signals will identify the normal chromosomes 7 (2R2G).

	Normal Signal Pattern	Del (7q22)(7q35)	Del(7q35)	Del (7q22)
Expected Signals	2R2G	1R1G	1R2G	2R1G

References: Kratz C et al, 2001, Genomics, 77; 171-180
Fischer K et al, 1997, Blood, 89; 2036-2041
Döhner K et al, 1998, Blood, 92; 4031-4035

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Application Manual

KBI-10202
ON MDS 7q- (7q22; 7q35)



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Application manual

