

Poseidon™ Repeat Free™ ATM (11q22) & SE 11 Control probe

Introduction: Deletions of the long arm of chromosome 11 (11q) are one of the most frequent structural chromosome aberrations in various types of lymphoproliferative disorders. 11q deletions were found in 20% of the B-CLL tumors as the second most frequent aberration and were predictive of poor survival. A 2- to 3-Mb sized critical genomic region located in bands 11q22.3-q23.1 has been identified and contains the ATM (ataxia telangiectasia mutated), RDX (radixin), and FDX1 (ferredoxin 1) genes.

Intended use: The **ATM (11q22)** specific DNA Probe is optimized to detect copy numbers of the ATM gene region at region 11q22. The Chromosome 11 Satellite enumeration (SE) probe 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 **ATM (11q22)** specific DNA probe is direct-labeled with PlatinumBright550.

Control region 2 (green): The **SE 11** 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 **ATM (11q22)** probe is designed as a dual-color assay to detect deletions at 11q22. Deletions involving the ATM gene region will show one red signal and two green signals at the chromosome 11 centromere control region (1R2G). Two single color red (R) and green (G) signals will identify the normal chromosomes 11 (2R2G)

| | Normal Signal Pattern | Del(11q22) |
|------------------|-----------------------|------------|
| Expected Signals | 2R2G | 1R2G |

References: Döhner H et al, 1997, Blood, 7; 2516-2522
Boultonwood J, 2001, J. Clin. Pathol., 54; 512-516

AM-KBI-10103_R1.0.doc



Application Manual

KBI-10103
ON ATM (11q22) / SE 11



KREATECH Diagnostics
Vlierweg 20
1032 LG Amsterdam
The Netherlands



Published Dec 2007

www.poseidondiagnosics.com

