

## Poseidon™ Repeat Free™ MLL (11q23) & SE 11 Control probe

**Introduction:** Deletions of the long arm of chromosome 11 involving band 11q23 define a subset of high-stage aggressive neuroblastomas.

**Intended use:** The **MLL (11q23)** Probe is optimized to detect amplification or deletion involving the MLL gene region at 11q23 in a dual-color assay on metaphase/interphase spreads, blood smears and bone marrow cells. 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 **MLL** gene region 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 **MLL (11q23)** probe is designed as a dual-color assay to detect deletions or amplifications involving 11q23. Deletions involving the MLL gene region will show one red signal and two green signals at the chromosome 11 centromere control region (1R2G). Amplification involving the MLL gene region at 11q23 will show three or more red signals, while the control at the chromosome 11 centromere will provide 2 signals (3R2G). Two single color red (R) and green (G) signals will identify the normal chromosomes 11 (2R2G).

Signal patterns other than those described above may indicate variant translocations or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

|                  | Normal Signal Pattern | Del 11q23 | Amp (11q23) |
|------------------|-----------------------|-----------|-------------|
| Expected Signals | 2F                    | 1R2G      | 3+R2G       |

**References:** Thirman et al, 1993, New Engl. J. Med., 329; 909-914.  
 Broeker et al, 1996, Blood, 87; 1912-1922.  
 De Preter et al, 2005, BMC Genomics 6; 97-107

AM-KBI-10711\_R1 0.doc



## Application Manual

KBI-10711  
 ON MLL (11q23) / SE 11

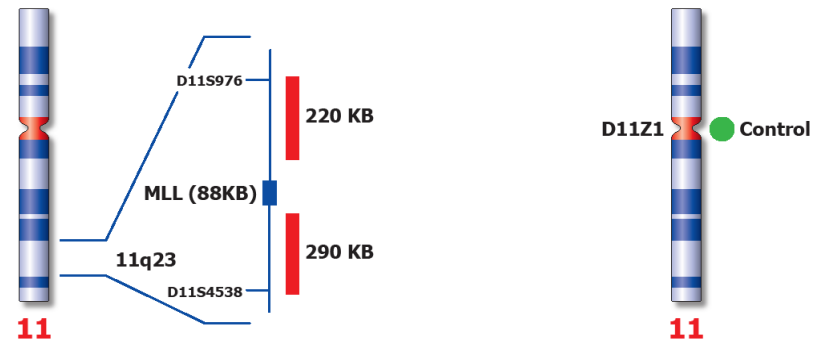


KREATECH Diagnostics  
 Vlierweg 20  
 1032 LG Amsterdam  
 The Netherlands



Published Dec 2007

www.poseidondiagnosics.com



Application manual