Cat Nr/REF: KBI-10302

English

For professional use only

Poseidon™ Repeat Free™ PML/RARA t(15;17) Fusion probe

Introduction: Acute myeloid leukemia (AML) is characterized by several recurrent chromosome anomalies, including the translocation t(15;17)(q24;q21). This translocation juxtaposes the promyelocytic leukemia (PML) gene on chromosome 15 and the retinoic acid receptor-alpha (RARA) gene on chromosome 17. AML with t(15;17) are usually assigned to a prognostic favorable group.

Intended use: The **PML/RARA t(15;17)(q24;q21) specific** DNA Probe is optimized to detect the reciprocal translocation t(15;17) in a dual-color, dual-fusion assay on metaphase/interphase spreads, blood smears and bone marrow cells.

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 **RARA (17q21)** specific DNA probe is direct-labeled with Platinum*Bright*550.

Critical region 2 (green): The **PML (15q24)** control DNA probe is direct-labeled with Platinum*Bright*495.

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 **PML/RARA t(15;17)** probe is designed as a dual-fusion probe to detect both rearranged chromosomes der(15) and der(17) by two co-localized red/green or yellow fusion signals (F). Single color red (R) and green (G) signals will identify the normal chromosomes 17 and 15 respectively.

Signal patterns other than those described above may indicate variant translocations, deletions on der(15) or der(17) or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	t(15;17)
Expected Signals	2R2G	2F1R1G

References: Grimwade D et al, 1997, Blood, 90; 4876-4885
Mancini M et al, 1995, Br J Haematol., 91; 878-884
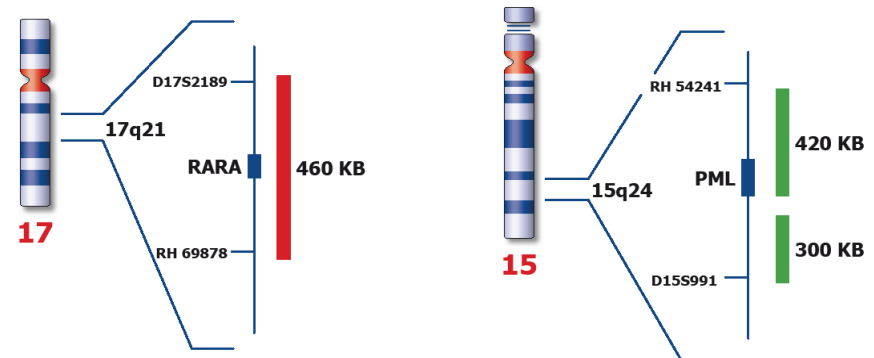
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POSEIDON™
REPEAT-FREE™ FISH PROBES

Application Manual

KBI-10302
ON PML/RARA t(15,17) Fusion

Application manual

IVD
for EU only

CE

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2°C — 8°C long term storage

KREATECH DIAGNOSTICS

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17   D17S2189   17q21   RARA   460 KB   RH 69878

15   RH 54241   15q24   PML   420 KB   300 KB   D15S991

Not to scale