

Poseidon™ Repeat Free™ AML/ETO t(8;21) Fusion probe

Introduction: The t(8;21)(q21;q22) is the most frequently observed karyotypic abnormality associated with acute myeloid leukemia (AML), especially in FAB M2. The translocation produces a chimeric gene made up of the 5-prime region of the AML1 gene at 21q22 fused to the 3-prime region of the ETO gene at 8q21.

Intended use: The **AML/ETO t(8;21)(q21;q22) specific** DNA Probe is optimized to detect the reciprocal translocation t(8;21) 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 **ETO (8q21)** specific DNA probe is direct-labeled with PlatinumBright550.

Critical region 2 (green): The **AML (21q22)** 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 **AML/ETO t(8;21)** probe is designed as a dual-fusion probe to detect both rearranged chromosomes der(8) and der(21) by two co-localized red/green or yellow fusion signals (F). Single color red (R) and green (G) signals will identify the normal chromosomes 8 and 21 respectively.

Signal patterns other than those described above may indicate variant translocations, deletions on der(8) or der(21) or other complex rearrangements. Investigators are advised to analyze metaphase cells for the interpretation of atypical signal patterns.

	Normal Signal Pattern	t(8;21)
Expected Signals	2R2G	2F1R1G

References:
 Greef G et al, 1995, Leukemia, 9: 282-287
 Hagemeijer A et al, 1998, Leukemia, 12: 96-101



Application Manual

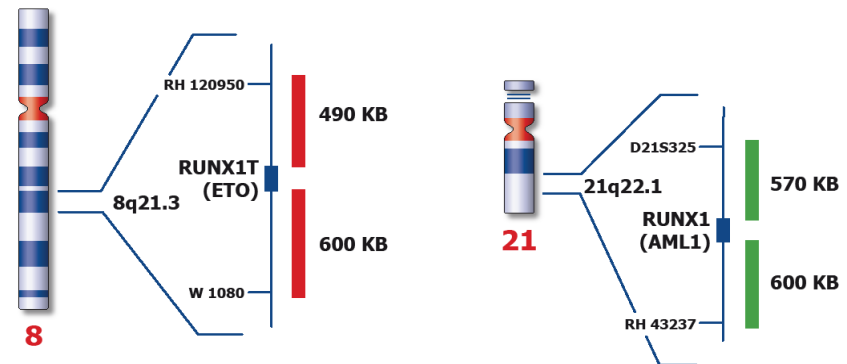
KBI-10301

ON AML/ETO t(8;21) Fusion



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Application manual