Cat Nr/REF: KBI-10205

English

For professional use only

Poseidon™ Repeat Free™ EVI t(3;3), inv(3), Triple-Color, Break probe

Introduction: The pericentric inversion of chromosome 3 and the t(3;3)(q21;q26) are two recurrent aberrations in bone marrow of patients with malignant myeloid diseases (MDS and AML). The inversion creates a novel fusion gene, which appears to be critical for leukemic transformation. In some cases translocation breakpoints a variable over a large genomic region. The Poseidon triple-color approach allows to detect all known breakpoints involved in t(3;3), inv(3) and associated translocations.

Intended use: **The EVI t(3;3) inv(3) Break** Probe is optimized to detect the inversion of chromosome 3 involving the EVI gene region at 3q26 in a dual-color, split 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 **distal EVI** gene region probe is direct-labeled with Platinum*Bright*550.

Critical region 2 (green): The **proximal EVI** gene region probe is direct-labeled with Platinum*Bright*495.

Critical region 3 (blue): The **further distal EVI** gene region probe is direct-labeled with Platinum*Bright*415

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 **EVI Break** probe is designed as a dual-color split probe to detect inversion or translocations at the EVI gene region at 3q26. A break is defined when a red/green/blue fusion signals (F) splits into separate red/bleu or blue and green or red/green signals. Only red/blue or blue and green or red/green signals which are more than one signal diameter apart from each other are counted as a break. Co-localized red/green/blue fusion signals identify the normal chromosome(s) 3.

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	t(3;3), inv(3)	t(3;3) and Variants
Expected Signals	2F	1F1RB1G	1F1BR1GR or 1F1B1GR

References:

Levy E. et al, 1994, Blood, 83; 1348-1354
Wieser R et al, 2003, Haematologica, 88; 25-30
Bobadilla D et al, 2007, Br J Haematol, 136; 806-813
De Melo V. et al, 2007, Leukemia, aop 13 sep, 1-4

POSEIDON™
REPEAT-FREE™ FISH PROBES

Application Manual

KBI-10205
ON EVI t(3;3); inv(3) (3q26) Break, TC

IVD
for EU only

CE

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2°C 8°C long term storage

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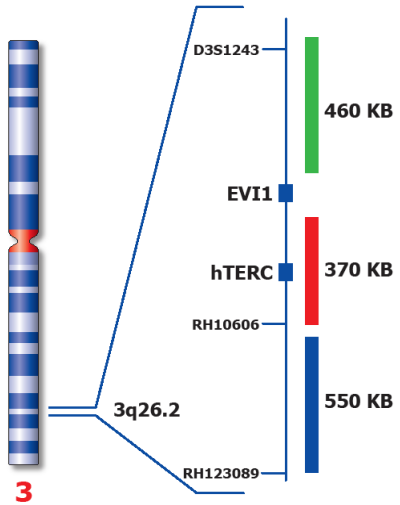

Not to scale

Application manual