Cat Nr/REF: KBI-10707

English

For professional use only

Poseidon™ Repeat Free™ PPARg (3p25) Break probe

Introduction: Chromosomal rearrangements at 3p25 have been reported in human tumors arising from thyroid follicular epithelial cells. Rearrangement of the peroxisome proliferator activated receptor gamma (PPARgamma) gene region (e.g. t(2;3) PAX8/PPARg) and amplification at 3p25 can arise independently in early follicular thyroid carcinomas. A dual-color break or split probe FISH assay for PPARg is best used to analyze translocation of the PPARG gene and to detect chromosome 3p25 aneusomie in routine clinical diagnosis.

Intended use: The **PPARg (3p25) Break** Probe is optimized to detect translocations and amplification involving the PPARg gene region at 3p25 in a dual-color, split assay.

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 PPARg** gene region probe is direct-labeled with Platinum*Bright*550.

Critical region 2 (green): The **proximal PPARg** gene region 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 **PPARg Break** probe is designed as a dual-color split probe to detect translocations and amplification at 3p25. A break is defined when a red/green or yellow fusion signals (F) splits into separate red and green signals. Only red and green signals which are more than one signal diameter apart from each other are counted as a break. Amplification involving the PPARg gene region at 3p35 will show 3 or more red-green fusion signals, while two co-localized red/green or yellow signals will 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	3p25 Split	3p25 Amplification
Expected Signals	2F	1F1R1G	3 or more F

References:
French et al, 2003, Am J Pathol, 162; 1053-1060.
Drischner et al, 2006, Thyroid, 16; 1091-1096.

POSEIDON™
REPEAT-FREE™ FISH PROBES

Application Manual

KBI-10707
ON PPARg (3p25) Break

IVD
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CE

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2°C 8°C long term storage

KREATECH DIAGNOSTICS

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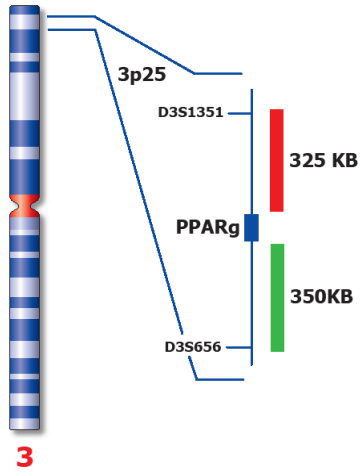

Not to scale

Application manual