

### Poseidon™ Chromosome X and Y Satellite Enumeration Probes

**Introduction:** Satellite Enumeration (SE) probes consist of sets of highly repetitive satellite DNA sequences located at the pericentric heterochromatin of chromosomes. They allow specific chromosome analysis, marker chromosome identification and the detection of aneuploidy. SE probes can be used in all aspects of routine and diagnostic work in genetics and oncology/pathology.

**Intended use:** **Chromosome X and Y Satellite Enumeration (SE) Probes** are optimized to detect repetitive sequences located in the pericentric heterochromatin of chromosome X and Y.

These probes are 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 **SE Y (DYZ3)** probe at Yp11.1-q11.1 is direct-labeled with PlatinumBright550.

**Critical region 2 (green):** The **SE X (DXZ1)** probe at Xp11.1-q11.1 is direct-labeled with PlatinumBright495.

**Reagent:** The SE X and SE Y 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:** **Satellite Enumeration Probes** in general will cover the centromeric region of individual or several chromosomes. Gain of chromosomes will be observed by additional signals, loss of chromosomes by lack of the SE specific signal. In normal cells two green signals will be visible for X chromosome in females, while in males one green and one red signal for the X and Y chromosome will be visible.

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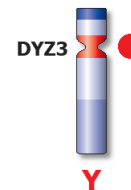
## Application Manual

KBI-20030  
SE X (DXZ1) / Y (DYZ3)



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Y



X

Application manual