



A Sysmex Group Company



Dual Labelled Satellite Probe Sets

REF: LPE 0XYc-A / LPE 0XYq-A

Analyte Specific Reagent: Analytical and performance characteristics are not established.

Fluorescence *In Situ* Hybridisation (FISH) is a technique that allows DNA sequences to be detected on metaphase chromosomes or in interphase nuclei from fixed cytogenetic samples. The technique uses DNA probes that hybridise to entire chromosomes or single unique sequences, and serves as a powerful adjunct to classic cytogenetics. Recent developments have meant that this valuable technique can now be applied as an essential tool in prenatal, haematological and pathological chromosomal analysis. Target DNA, after fixation and denaturation, is available for annealing to a similarly denatured, fluorescently labelled DNA probe, which has a complementary sequence. Following hybridisation, unbound and non-specifically bound DNA probe is removed and the DNA is counterstained for visualisation. Fluorescence microscopy then allows the visualisation of the hybridised probe on the target material.

Probe Specification

X_{Yc}

DXZ1, Xp11.1- q11.1, Green

DYZ3, Yp11.1- q11.1, Red

X_{Yq}

DXZ1, Xp11.1- q11.1, Green

DYZ1, Yq12, Red

Chromosome X α -satellite (DXZ1) and Chromosome Y α -satellite (DYZ3)

This enumeration probe set contains chromosome specific alphoid DNA repeat sequences located at the centromeres of chromosome X and chromosome Y.

Chromosome X α -satellite (DXZ1) and Chromosome Y satellite III (DYZ1)

This enumeration probe set contains chromosome specific DNA repeat sequences located at the centromere of chromosome X and in the heterochromatic block of chromosome Y.

Materials Provided

Probe: 100 μ l per vial

The probe is provided in hybridisation solution (Formamide; Dextran Sulphate; SSC) and is ready to use. The probe DNA is directly labelled: X with a green fluorophore and Y probes with a red fluorophore.

Warnings and Precautions

1. For professional use only.
2. Wear gloves when handling DNA probes.
3. Probe contains formamide, which is a teratogen; do not breathe fumes or allow skin contact. Wear gloves, a lab coat, and handle in a fume hood. Upon disposal, flush with a large volume of water.
4. All hazardous materials should be disposed of according to your institution's guidelines for hazardous waste disposal.

Storage and Handling

The probe should be stored between -25°C to -15°C in a freezer until the expiry date indicated on the kit label. The probe vial must be stored in the dark.

Known Cross-Reactivity

The LPE 0XYc probe may show cross-hybridisation to chromosome Y and chromosome X and the centromeres of chromosomes 1, 11, 13, 14, 15, 17, 20, 21 and 22.

The LPE 0XYq probe may show cross-hybridisation to chromosome Y and the centromeres of chromosomes 1, 11 and 17.

Additional Information

For additional product information please contact the CytoCell Technical Support Department.

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Patents and Trademarks

CytoCell is a registered trademark of Cytozell Limited.



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