



A Sysmex Group Company



Kallmann (KAL1) Region/STS Region Probe

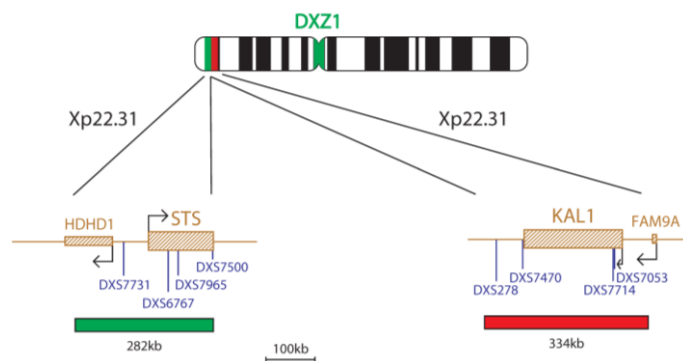
REF: LPU 016-SA/LPU 016-A

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

KAL1, Xp22.31, Red
STS, Xp22.31, Green
DXZ1, Xp11.1-q11.1, Green



The KAL1 probe is 334kb, labelled in red that spans the entire KAL1 gene and the DXS278 and DXS7053 markers. The STS probe is 282kb, labelled in green and covers most of the HDHD1 and STS genes. The probe mix also contains a control probe for the X centromere (DXZ1), labelled in green.

Materials Provided

Probe: 50µl per vial or 100µl per vial

Probe concentration: Amount of red probe 0.840-1.42ng/µl
Amount of green STS probe 9.04-13.5ng/µl
Amount of green DXZ1 probe 0.897-1.34ng/µl

The probe is provided in hybridisation solution (Formamide; Dextran Sulphate; SSC) and is ready to use.

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. Dispose of all hazardous materials according to your institution's guidelines for hazardous waste disposal.
5. Operators must be capable of visually distinguishing between red, blue and green.

Storage and Handling

The kit should be stored between -25°C to -15°C in a freezer until the expiry date indicated on the kit label. Store the probe vial in the dark. Ensure that exposure of the probe to laboratory lights is limited at all times.

Known Cross-Reactivity

The STS and KAL1 region probes may show strong cross-hybridisation to the Y chromosome, because of sequence homologies in this region.

Additional Information

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

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Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP):



GHS07



GHS08

Signal word (CLP): Danger

Hazardous ingredients: Formamide <100%

Hazard statements (CLP):

H315 – Causes skin irritation

H319 – Causes serious eye irritation

H360 – May damage fertility or the unborn child

Precautionary statements (CLP):

P202 – Do not handle until all safety precautions have been read and understood

P280 – Wear eye protection, protective clothing, protective gloves

P302+P352 – IF ON SKIN: Wash with plenty of soap and water

P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing

P308+P313 – IF exposed or concerned: Get medical advice/attention

P362+P364 – Take off contaminated clothing and wash it before reuse

P501 – Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

Refer to Safety Data Sheet for more information.

Patents and Trademarks

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