Cat Nr/REF: KBI-40002

English

For professional use only

Poseidon™ Repeat Free™ Chromosome 21 (21q22) Specific probe

Introduction:

Trisomy 21 is one of the most common chromosomal abnormalities in live born children and causes Down syndrome, a particular combination of phenotypic features that includes mental retardation and characteristic facies. Molecular analysis has revealed that the 21q22.1-q22.3 region appears to contain the gene(s) responsible for the congenital heart disease observed in Down syndrome.

Intended use:

The **chromosome 21 specific** region probe is optimized to detect copy numbers of chromosome 21 at 21q22.1 on uncultured amniotic 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 **21q specific** DNA probe is direct-labeled with Platinum*Bright*550.

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 **Chromosome 21 specific** probe is designed as a single-color assay to detect gains of chromosome 21. Trisomy 21 will be detected by three red signal at the 21q22 region.
Two single colors red (R) signals will identify the normal chromosomes 21 (2R).

	Normal Signal Pattern	Trisomy 21
Expected Signals	2R	3R

References:

Korenberg J. et al, 1994, Proc. Nat. Acad. Sci. 91; 4997-5001
Spathas D et al, 1994, Prenat Diagn. 14(11); 1049-1054
Tepperberg et al, 2001, Prenat Diagn 21(4); 293-301

POSEIDON™
REPEAT-FREE™ FISH PROBES

Application Manual

KBI-40002
PN 21 (21q22)

IVD
for EU only

CE 0344

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2°C 8°C long term storage

KREATECH DIAGNOSTICS

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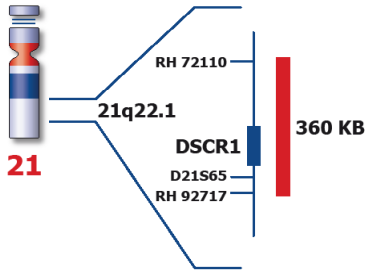

Not to scale

Application manual