

# FlexISH® IGK/IGL DistinguISH™ Probe



## Background

The FlexISH® IGK/IGL DistinguISH™ Probe (PL249) is intended to be used for the qualitative detection of translocations involving the IGK locus at 2p11.2 and the IGL locus at 22q11.22 in formalin-fixed, paraffin-embedded specimens by fluorescence *in situ* hybridization (FISH). The probe is intended to be used in combination with the FlexISH®-Tissue Implementation Kit (Prod. No. Z-2182-5/-20).

The product is intended for professional use only. All tests using the product should be performed in a certified, licensed anatomic pathology laboratory under the supervision of a pathologist/human geneticist by qualified personnel.

The probe is intended to be used as an aid to the differential diagnosis of various cancers and therapeutic measures should not be initiated based on the test result alone.

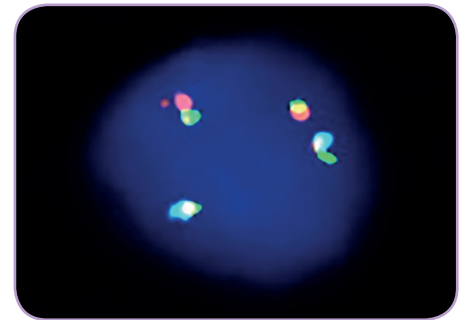
## Probe Description

The FlexISH® IGK/IGL DistinguISH™ Probe is composed of:

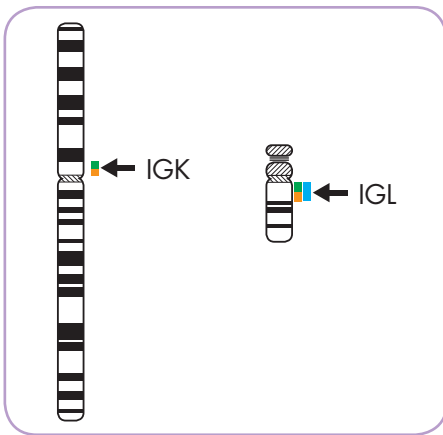
- ZyGreen (excitation 503 nm/emission 528 nm) labeled polynucleotides (~10.0 ng/μl), which target sequences mapping in 22q11.21-q11.22\*\* (chr22:21,807,535-22,942,402) proximal to the IGL breakpoint region and in 2p11.2\*\* (chr2:88,592,864-89,153,517) distal to the IGK breakpoint region.
- ZyOrange (excitation 547 nm/emission 572 nm) labeled polynucleotides (~2.5 ng/μl), which target sequences mapping in 2p11.2\*\* (chr2:89,246,977-89,609,390 and chr2:89,853,315-90,089,156) proximal to the IGK breakpoint region and in 22q11.22-q11.23\*\* (chr22:23,324,781-23,679,042) distal to the IGL breakpoint region. Due to homologous sequence segments proximal to the IGK breakpoint region, the orange probe has two hybridization regions in close proximity.
- ZyBlue (excitation 418 nm/emission 467 nm) labeled polynucleotides (~70.0 ng/μl), which target sequences mapping in 22q11.21-q11.23\*\* (chr22:22,185,288-23,512,555) harboring the IGL locus
- Formamide based hybridization buffer

## Results

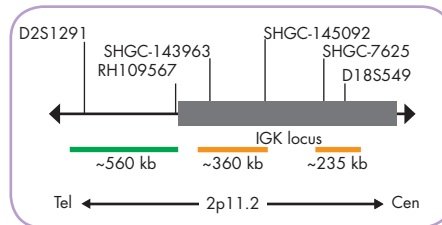
In an interphase nucleus without IGK or IGL rearrangements, two IGK specific green/orange fusion signals and two IGL specific green/orange/blue fusion signals are expected. An IGK rearrangement is indicated by one separate green and one separate orange signal, both not co-localizing with blue signals. Due to the two hybridization regions of the orange probe hybridizing to the IGK locus, IGK-specific orange signals may appear as paired signal dots. An IGL rearrangement is indicated by one separate green and one separate orange signal, both co-localizing with blue signals.



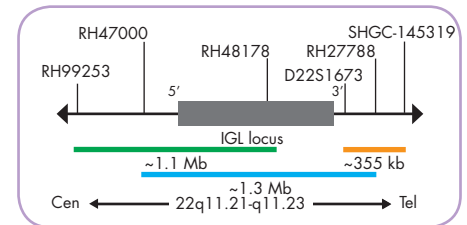
FlexISH IGK/IGL DistinguISH™ Probe on a normal interphase cell with non-rearranged IGK loci (two green/orange fusion signals) and non-rearranged IGL loci (two green/orange/blue fusion signals). Orange signals of the IGK locus may appear as paired signal dots.



Ideograms of chromosomes 2 (left) and 22 (right) indicating the hybridization locations.



IGK Probe map (not to scale).



IGL Probe map (not to scale).

Prod. No.	Product	Label	Tests* (Volume)
Z-2295-50	FlexISH IGK/IGL DistinguISH Probe CE IVD	●/●/●	5 (50 μl)
<b>Related Products</b>			
Z-2182-5	FlexISH-Tissue Implementation Kit CE IVD		5
Incl. Heat Pretreatment Solution Citric, 150 ml; Pepsin Solution, 1 ml; 5x FlexISH Wash Buffer, 150 ml; DAPI/DuraTect-Solution, 0.2 ml			

\* Using 10 μl probe solution per test. IVD labeled products are only available in certain countries. All other countries research use only! Please contact your local dealer for more information.

\*\*According to Human Genome Assembly GRCh37/hg19