1q21.3 Orange/1p21.2 Green FISH Probe

Catalog Number: PFR7044A
Description: 1q21.3 Orange / 1p21.2 Green FISH Probe
Volume: 100 µL

Intended Use:
For Research Use Only. Not for use in diagnostic procedures.

Summary and Explanation:
The 1q21.3 Orange /1p21.2 Green dual color probe is designed to detect chromosomal aberrations on chromosome 1. Chromosome 1 aberrations are some of the most commonly identified cytogenetic abnormalities observed in multiple myeloma cases, accounting for approximately 40% of the cytogenetic abnormalities identified. Specifically, gene copy number variations occurring within the 1q21.3 region on chromosome 1 have been associated with disease progression. Similarly, gene aberrations occurring within the 1p21.2 region on chromosome 1 are believed to have carcinogenic properties, and contribute to the disease phenotype. The clinical and biological features found in multiple myeloma are influenced by the cytogenetic abnormalities occurring at both 1p21.2 and 1q21.3 regions on chromosome 1, suggesting that together these biological features may serve as prognostic markers associated with multiple myeloma pathogenesis.

Principle of Procedure:
The 1q21.3 probe labeled in orange is ~548kb in size and is located on chromosome 1q21.3. The 1p21.2 probe labeled in green is ~655kb in size and is located on chromosome 1p21.2. Both probes are designed to detect copy number variations within their perspective regions.

Species Reactivity: Human

Fluorophore | Excitation (nm) | Emission (nm) |
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GREEN       | 498            | 522           |
ORANGE      | 537            | 556           |

Technical Support:
Contact Biocare’s Technical Support at 1-800-542-2002 for questions regarding this product.

References: