7q31 Orange + Copy Control 7 Green

FISH Probe 902-7047-102517

Catalog Number: Description:	PFR7047A 7q31 Orange + Copy Control 7 Green FISH Probe
Dilution:	Ready-to-use
Volume:	100 µL

Intended Use:

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

Summary and Explanation:

Research into myeloid disorders including myelodysplastic syndrome (MDS) and acute myeloid dysplasia (AML) has shown frequent monosomy of chromosome seven as well as deletion of the 7q region^{1,2}. Further, it has been shown that this deletion of the 7q region on the long arm of chromosome 7 is not only a consistent finding in myeloid disorders but is also invariably associated with a poor prognosis³.

Principle of Procedure:

The 7q31 Orange Probe is designed to provide coverage of the 7q31 (\sim 395 kb) region of chromsome 7. The Copy Control 7 Green Probe is designed to hybridize to human a-satellite DNA sequences located at the centromere region of chromosome 7.



*not to scale



A) 7q31 Orange + Copy Control 7 Green FISH probe hybridized on normal blood sample. Interphase and metaphase cellular states are shown. B) 7q31 Orange + Copy Control 7 Green FISH probe hybridized on an FFPE sample.

Species Reactivity: Human

Known Application:

Fluorescence In-Situ Hybridization (FISH) on formalin-fixed paraffin embedded (FFPE) tissues.

BIOCARE

EDICA

Supplied As: Probe in hybridization buffer.

Storage and Stability:

Store probe at -20° C and away from light. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date.

Technical Note:

Biocare Medical FISH probes are optimized to provide the best signal performance using optical filters that can accommodate the excitation/emission wavelengths specified below. Using filters outside these spectral specifications may produce sub-optimal results.

Fluorophore	Excitation (nm)	Emission (nm)
AQUA	432	472
GREEN	498	521
ORANGE	546	575
RED	593	618

Limitations:

- 1. This product is Research Use Only.
- 2. It is the responsibility of the user to validate any test for its specific use.

Precautions:

- This product contains formamide, which may be toxic. Formamide may cause serious eye damage or reproductive toxicity. It may also cause irritation by inhalation or skin contact. Avoid any direct contact exposure to reagent. Take appropriate protective measures (use disposable gloves, protective glasses, and lab garments).
- Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water⁴.
- 3. The SDS is available upon request and is located at http://biocare.net/.

Technical Support:

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



7q31 Orange + Copy Control 7 Green

FISH Probe 902-7047-102517



References:

- Cytogenetic and molecular delineation of a region of chromosome 7 commonly deleted in malignant myeloid diseases. Le Beau MM, Espinosa R 3rd, Davis EM, Eisenbart JD, Larson RA, Green ED. Blood. 1996 ; 88 (6) : 1930-1935.
- Cytogenetic clonality analysis in myelodysplastic syndrome: monosomy 7 can be demonstrated in the myeloid and in the lymphoid lineage. van Lom K, Hagemeijer A, Smit E, Hählen K, Groeneveld K, Löwenberg B. Leukemia : official journal of

the Leukemia Society of America, Leukemia Research Fund, U.K. 1995; 9 (11): 1818-1821.

- Delineation of Multiple Deleted Regions in 7q in Myeloid Disorders. Sabrina Tosi, Stephen W. Scherer, Giovanni Giudici, Barbara Czepulkowski, Andrea Biondi, and Lyndal Kearney. Genes, Chromosomes & Cancer 25:384–392 (1999)
- Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory workers from occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.