MYC (8q24) Orange + Copy Control 8 Green

FISH Probe
902-OPPR7342-020322

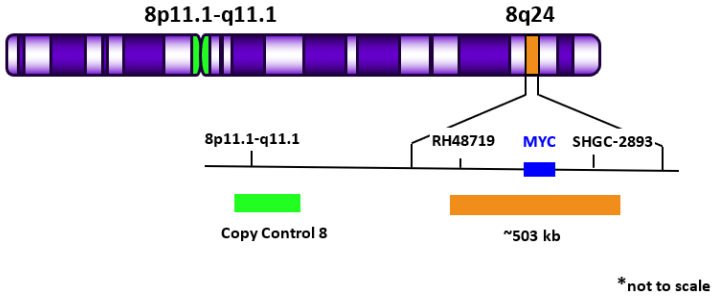
Catalog Number: **OPPR7342 T30**

Description: **Prediluted FISH Probe**

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

Summary & Explanation:
The MYC gene belongs to a family of transcription factors that under normal conditions it controls cell cycle progression (1). However, in multiple types of cancer, MYC is considered a Proto-oncogene (1). MYC gene deregulation is identified in multiple malignancies such as Burkitt's lymphoma, diffuse large B-cell lymphoma, and B-cell lymphoma (2). MYC gene amplifications, rearrangements, and/or point mutations are considered the underlying mechanisms that induce MYC gene deregulation (1). Specifically, a MYC gene rearrangement is considered an important marker in several cancer subtypes. MYC gene rearrangements can be identified using conventional cytogenetic techniques such as fluorescence in situ hybridization (FISH).

Principle of Procedure:
The dual color MYC (8q24) Orange + Copy Control 8 Green FISH probe is designed to detect copy number alterations of MYC and chromosome 8. The orange probe covers ~503kb of the MYC (8q24) region and the green probe binds to α-satellite DNA sequences located at the centromere region of chromosome 8. A normal nucleus will show two green and two orange signals.



Species Reactivity: Human

Known Application: Fluorescence In-situ Hybridization (FISH) on formalin-fixed paraffin-embedded (FFPE) tissues.

Supplied As: Probe in hybridization buffer

Reconstitution, Dilution and Mixing:
MYC (8q24) Orange + Copy Control 8 Green FISH Probe is provided ready-to-use.
Bring the vial to room temperature 30 minutes prior to EACH use and MIX WELL by shaking vigorously by hand for 3 minutes in different orientations. If vial volume is 1mL or less, mix using a pipette for 20 aspirations.

Materials and Reagents Required but Not Provided:
Reagents and materials, such as detection kits and ancillary reagents are not provided. Refer to the ONCORE Pro FISH Kit (OPRR6064K) and the ONCORE Pro ISH Dewax Kit (OPRI6020K) datasheets. DAPI (120ng/mL) solution is also required for counterstaining. Call Technical Support for additional information on reagents and instrument accessories.

Storage and Stability:
Store probe at -20ºC 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.

Instructions for Use:
OPPR7342 is intended for use with the ONCORE Pro. Refer to the User Manual for specific instructions for use. Protocol parameters in the Protocol Editor should be programmed as follows:
Protocol Name: MYC+CC8 2CP
Protocol Template (Description): PathoFISH Template 1
Reagent Name, Time, Temp.: FISHzyme*, 35 min., 37°C

*FISHzyme (OPRR6066) is a part of ONCORE Pro FISH Kit (OPRR6064K).
Incubation time of FISHzyme may be modified based on the tissue type and tissue fixation.

Slides should be baked offline for 1 hour at 60°C prior to loading onto the instrument.

The ONCORE Pro Baking Slides Before Staining setting should be selected and set for 10 min at 60°C to improve tissue retention.

Post ONCORE Pro FISH staining processing:
1. Gently rinse slides in TBS buffer, followed by a gentle rinse in DI water.
2. Place the slide rack in a dark cabinet to air dry.
3. Apply 1-2 drops of Fluoro Care Mounting Media (FP001) under a suitable size coverslip, e.g., 22x40 mm.

Technical Notes:
1. FISH runs should not be delayed as the probe will separate.
2. Biocare Medical Dual Color 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)
GREEN	490	515
ORANGE	546	575

Limitations:
This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.

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ONCORE™ PRO

BIOCARE MEDICAL

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FISH Probe
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Precautions:

1. This product contains formamide and fluorescent dyes that may be hazardous to your health. The SDS is available upon request and is located at http://biocare.net.
2. 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 water (3).

Health Hazard

Irritant

Corrosive (to skin)

Technical Support:

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

References:

1. Aquino, Gabriella, Laura Marra, Monica Cantile, Annarosaria De Chiara, Giuseppina Liguori, Maria Curcio, Rocco Sabatino, Giuseppe Pannone, Antonio Pinto, Gerardo Botti, and Renato Franco. "MYC Chromosomal Aberration in Differential Diagnosis between Burkitt and Other Aggressive Lymphomas." Infectious Agents and Cancer (2013): 1-9. Print.
2. Munoz-Marmol, Ana M, Carolina Sanz, Gustavo Tapia, Ruth Marginet, Aurelio Ariza, and Jose L Mate. "MYC Status Determination in Aggressive B-cell Lymphoma the Impact of FISH Probe Selection." Histopathology (2013): 418-24. Print.
3. 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.

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