# AR (Xq12) Red + Copy Control Xp11.21 Green

FISH Probe 902-7004-102517

# Catalog Number: PFR7004A

 
 Description:
 AR (Xq12) Red + Copy Control Xp11.21 Green FISH Probe

 Dilution:
 Ready-to-use

 Volume:
 100 μL

## Intended Use:

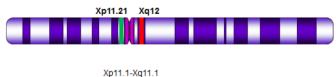
For Research Use Only. Not for use in diagnostic procedures.

# Summary and Explanation:

Androgen receptor (AR) is a DNA binding transcription factor, which can regulate the growth of prostate epithelial cells. In prostate carcinoma AR positive patients will respond to hormonal therapy. It serves as prognostic biomarker for those patients.<sup>1</sup>

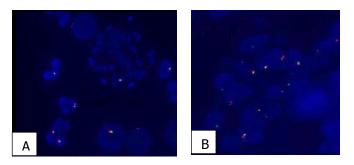
## **Principle of Procedure:**

The AR (Xq12) Red + Copy Control Xp11.21 Green FISH Probe is designed to detect amplifications of the androgen receptor (AR) gene. The AR red probe spans ~403kb of the AR (Xq12) region. The pericentromeric control probe is located at Xp11.21, covers a ~534kb region and is labeled in green. A normal male nucleus will contain one red and one green signal.





\*Not to scale



(A) The AR (Xq12) Red + Copy Control Xp11.21 Green probe hybridized on a normal male sample will show one red and one green signal. Interphase and metaphase cellular state are shown. (B) FISH probe hybridized on FFPE tissue.

## Species Reactivity: Human

#### **Known Application:**

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

Biocare Medical 60 Berry Drive Pacheco, CA 94553 USA 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.

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## **Technical Note:**

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	498	522
RED	592	628

#### Precautions:

- 1. This product is Research Use Only.
- 2. It is the responsibility of the user to validate any test for its specific use.
- 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).
- 4. 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<sup>2</sup>.
- 5. The SDS is available upon request and is located at http://biocare.net/.

#### References:

- Pomerantz MM, Li F, Takeda DY, Lenci R, Chonkar A, Chabot M, Cejas P, Vazquez F, Cook J, Shivdasani RA, Bowden M, Lis R, Hahn WC, Kantoff PW, Brown M, Loda M, Long HW, Freedman ML. The androgen receptor cistrome is extensively reprogrammed in human prostate tumorigenesis. Nat Genet. 2015 Oct 12. doi: 10.1038/ng.3419.
- 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.