PTEN (10q23) Orange + Copy Control 10 Green

FISH Probe
902-7034-102517

BIOCARE MEDICAL

Catalog Number: PFR7034A

Description: PTEN (10q23) Orange + Copy Control 10 Green FISH Probe

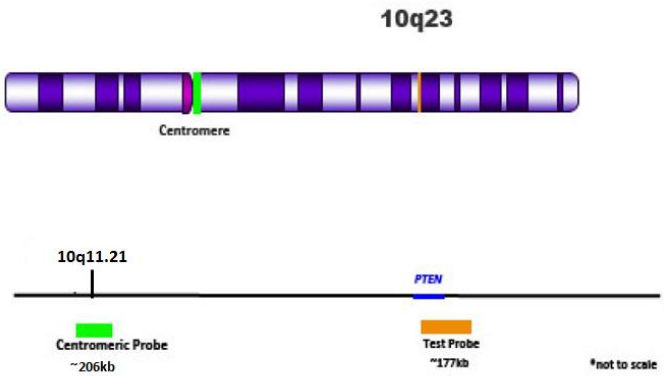
Dilution: Ready-to-use

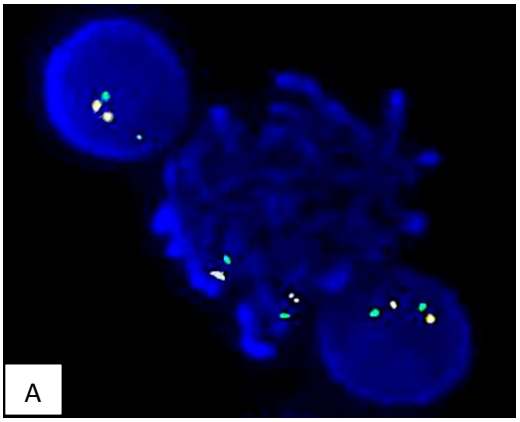
Volume: 100 µL

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

Summary and Explanation:
The PTEN (Phosphatase and Tensin) gene encodes a phosphatase which counteracts the PI3K/Akt signaling pathway. It is involved in the regulation of DNA repair, genomic instability, stem cell self-renewal, cellular senescence, and cell migration[1].

Principle of Procedure:
The PTEN (10q23) Orange + Copy Control 10 Green FISH probe is designed to detect ~177kb of the PTEN (10q23) region and ~ 206kb of the 10q11.21 region on chromosome 10. A normal cell would show two orange and two green signals.





(A) PTEN (10q23) Orange + Copy Control 10 Green FISH Probe hybridized on normal blood sample. Interphase and metaphase cellular state are shown.

Species Reactivity: Human
Known Application:
Fluorescence In-situ Hybridization (FISH) on formalin-fixed paraffin-embedded (FFPE) tissues.
Supplied As: Probe in hybridization buffer.

Storage and Stability:
Store at minus 20ºC and away from light. Do not use after expiration date printed on vial. If probes are stored under conditions other than those specified in the package insert, they must be verified by the user. Any remaining probe should be stored at minus 20ºC.

Technical Note:
Biocare Medical dual color FISH probes are optimized to provide the best signal performance using optical filter with spectral ranges specified below. Using filters outside these spectral ranges may produce sub-optimal results.

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

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.

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

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with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water[4].

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

References:

1. Yoshimoto M, Cutz J-C, Nuin PAS, Joshua AM, Bayani J, Evans AJ, Zielenska M,Squire JA. Interphase FISH Analysis of PTEN in Histologic Sections Shows Genomic Deletions are Present in 68% of Primary Prostate Cancer and 23% of High-Grade Prostatic Intra-Epithelial Neoplasia. Cancer Genetics and Cytogenetics 169:128-37, 2006.
2. 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.