CCND1 (11q13) Orange + Copy Control 11 Green

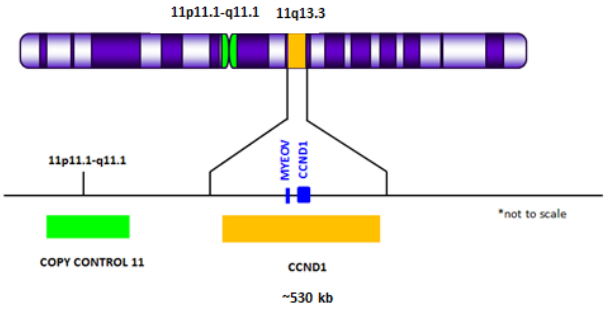
FISH Probe
902-7006-102517

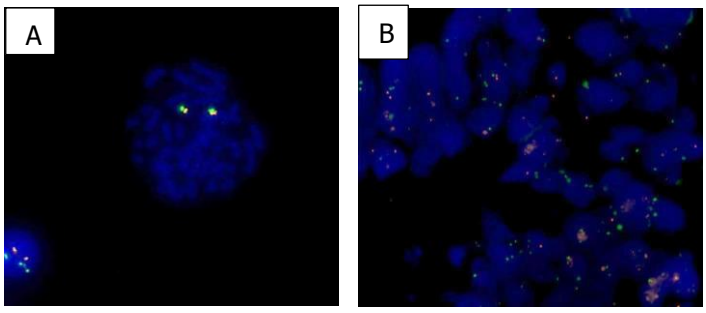
Catalog Number: PFR7006A
Description: CCND1 (11q13) Orange + Copy Control 11 Green FISH Probe
Dilution: Ready-to-use
Volume: 100 µL

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

Summary and Explanation:
CCND1 encodes protein cyclin D1, which can interact with other cell cycle control proteins to regulate cell cycle progression. Its amplification, mutation and overexpression are often observed in solid tumors and mantle cell lymphoma[1,2,3,4].

Principle of Procedure:
The CCND1 (11q13) Orange + Copy Control 11 Green FISH probe is designed to detect copy number alterations of CCND1 and chromosome 11. The CCND1 orange probe spans ~530kb of the 11q13.3 region of chromosome 11. The Copy Control 11 green probe consists of highly repeated human α-satellite DNA sequences located at the centromere region of chromosome 11. A normal cell will show two orange and two green signals.





(A) CCND1 (11q13) Orange +Copy Control 11 Green probe hybridized on normal blood sample. Interphase and metaphase cellular states are shown. (B) CCND1 (11q13) Orange +Copy Control 11 Green FISH probe hybridized on FFPE tissue.

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 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.

Technical Note:
Biocare Medical FISH 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
ORANGE	537	556

Precautions:
1. This product is Research Use Only.
2. It is the responsibility of the user to validate any test for its specific use.
3. 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[5].
5. The SDS is available upon request and is located at http://biocare.net/.

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

References:

1. Siegert JL, et al. Cyclin D1 suppresses retinoblastoma protein-mediated inhibition of TAFII250 kinase activity. Oncogene 19(50):5703-11 (2000).
2. Dowdy SF, et al. Physical interaction of the retinoblastoma protein with human D cyclins. Cell 73(3):499-511 (1993).
3. Motokura T, et al. A novel cyclin encoded by a bcl1-linked candidate oncogene. Nature 350(6318):512-5 (1991).
4. Lew DJ, et al. Induction of cyclin mRNA and cyclin-associated histone H1 kinase during liver regeneration. Cell 66(6):1197-206 (1991).
5. 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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