

# D13S25 (13q14.3) Orange/ LAMP1 (13q34) Green

FISH Probe  
902-7010-113017

**BIOCARE**  
M E D I C A L

**Catalog Number:** PFR7010A

**Description:** D13S25 (13q14.3) Orange/ LAMP1 (13q34) Green  
FISH Probe

**Dilution:** Ready-to-use

**Volume:** 100 µL

**Intended Use:**

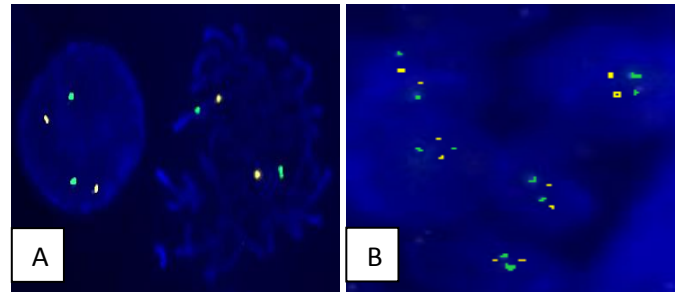
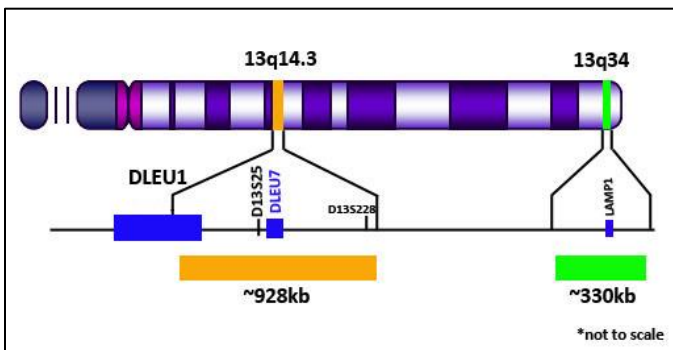
For Research Use Only. Not for use in diagnostic procedures.

**Summary and Explanation:**

The D13S25 (13q14.3) Orange/ LAMP1 (13q34) Green FISH probe is designed to detect chromosomal abnormalities on chromosome 13. Deletions on chromosome 13q are associated with multiple cancers such as, multiple myeloma, chronic lymphocytic leukemia, and B-cell non-Hodgkin's lymphoma<sup>1,2,3</sup>. In the case of CLL, the large deletion spanning the 13q14 region is considered the most common genetic aberration and is detected in approximately 50% of CLL cases<sup>2</sup>. The 13q14 deletion results in the loss of the tumor suppressor candidate gene, DLEU7<sup>2</sup>. Fluorescence in-situ hybridization (FISH) can be used to detect the chromosomal abnormalities occurring on chromosome 13q14.

**Principle of Procedure:**

The D13S25 (13q14.3) Orange/ LAMP1 (13q34) Green FISH probe is designed to detect deletions of the 13q14.3 region. The 13q14.3 probe is labeled in orange and covers ~928kb. The control probe labeled in green is located at 13q34, spans the LAMP1 gene and is ~330kb in size. A cell with normal copy numbers of the 13q14.3 region and chromosome 13 will have two orange signals (13q14.3) and two green signals.



(A) D13S25 (13q14.3) Orange/ LAMP1 (13q34) Green FISH probe hybridized on normal blood sample. Interphase and metaphase cellular state are shown. (B) D13S25 (13q14.3) Orange/ LAMP1 (13q34) Green FISH probe hybridized on cervical 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 -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 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	521
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.

**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<sup>4</sup>.

**Technical Support:**

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

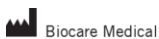
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### References:

1. Fonseca, R., M M Oken, D. Harrington, R J Bailey, S A Van Wier, K J Henderson, N E Kay, B Van Ness, P R Greipp, and G W Dewald. "Deletions of Chromosome 13 in Multiple Myeloma Identified by Interphase FISH Usually Denote Large Deletions of the Q Arm or Monosomy." *Leukemia* (2001): 981-86.
2. Palamarchuk, A., A. Efanov, N. Nazaryan, U. Santanam, H. Alder, L. Rassenti, T. Kipps, C. M. Croce, and Y. Pekarsky. "13q14 Deletions in CLL Involve Cooperating Tumor Suppressors." *Blood* (2010): 3916-922.
3. Rosenwald, Andreas, German Ott, Ann Katrin Krumdiek, Martin H. Dreyling, Tiemo Katzenberger, Jorg Kalla, Silke Roth, M. Michaela Ott, and Hans Konrad Muller-Hermelink. "A Biological Role for Deletions in Chromosomal Band 13q14 in Mantle Cell and Peripheral T-cell Lymphomas?" *Genes, Chromosomes and Cancer* (1999): 210-14.
4. 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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