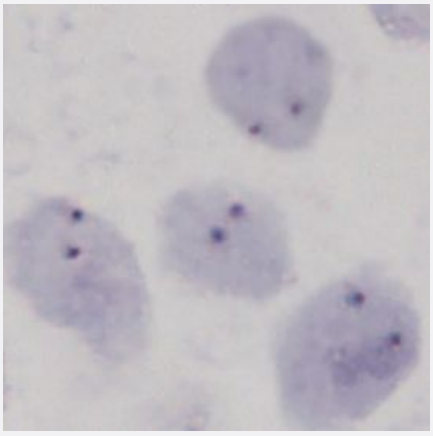
EML4 Split CISH Probe

Catalog # CS0006 Size 400 uL

Applications



Chromogenic *In Situ* Hybridization (Cells)

EML4 Split CISH Probe hybridized to normal interphase cells as indicated by two red/green fusion signals pert nucleus.

Specification

Product Description	EML4 Split CISH Probe is designed for the qualitative detection of translocations involving the human EML4 gene at 2p21 in formalin-fixed, paraffin-embedded specimens by chromogenic *in situ* hybridization (CISH).
Reactivity	Human
Recommend Usage	The product is ready-to-use. No reconstitution, mixing, or dilution is required. Bring probe to room temperature (18-25°C) and mix briefly before use.
Supplied Product	Reagent Provided: This Probe is composed of: 1. Digoxigenin-labeled polynucleotides, which target sequences mapping in 2p21* (chr2:42,342,038-42,464,761) distal to the EML4 breakpoint region. 2. Dinitrophenyl-labeled polynucleotides, which target sequences mapping in 2p21* (chr2:42,576,262-43,163,545) proximal to the EML4 breakpoint region. 3. Formamide based hybridization buffer. *according to Human Genome Assembly GRCh37/hg19

Probe Position	
Regulatory Status	For research use only (RUO)
Storage Instruction	Store at 2-8°C in an upright position. Return to storage conditions immediately after use.
Note	The probe is intended to be used in combination with the CISH Implementation Kit 2 (Catalog #: KA5366), which provides necessary reagents for specimen pretreatment and post-hybridization processing. Interpretation of results: Using the CISH Implementation Kit 2 (Cat # KA5366), hybridization signals of Digoxigenin-labeled polynucleotides appear as dark green colored distinct dots (distal to the EML4 breakpoint region), and Dinitrophenyl-labeled polynucleotides appear as bright red colored distinct dots (proximal to the EML4 breakpoint region). **Normal situation**: In interphases of normal cells or cells without a translocation involving the EML4 gene region, two red/green fusion signals appear. **Aberrant situation**: One EML4 gene region affected by a translocation is indicated by one separate green signal and one separate red signal. Overlapping signals may appear as brown signals. Genomic aberrations due to small deletions, duplications or inversions might result in inconspicuous signal patterns. Other signal patterns than those described above may be observed in some abnormal samples. These unexpected signal patterns should be further investigated.
Interpretation of Result	

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Gene Info — EML4

Entrez GeneID	27436
Gene Name	EML4
Gene Alias	C2orf2, DKFZp686P18118, ELP120, FLJ10942, FLJ32318, ROPP120
Gene Description	echinoderm microtubule associated protein like 4
Omim ID	607442
Gene Ontology	Hyperlink
Other Designations	-

Disease

- Adenocarcinoma
- Lung Neoplasms