# CCND1/CEN11q FISH Probe

**Catalog #: FG0113**  
**Size: [ 200 uL ]**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Application Image</th>
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<tbody>
<tr>
<td><strong>Product Description:</strong></td>
<td><strong>Fluorescent In Situ Hybridization</strong></td>
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<td>Labeled FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique.</td>
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<td><strong>Quality Control Testing:</strong></td>
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<td>Representative images of human cell stain with the dual color FISH probe. The left image is two copies of CCND1 gene and two copies of chromosome 11 in HL60S cell line; and the right image is two copies of chromosome 11 and higher copy number of CCND1 gene (amplification) in SKMEL2 cell line.</td>
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**Storage Instruction:**  
Store at -20°C in the dark.

**Note:**  
Hybridization position of the probes on the chromosome.

**Probe 1:**  
- **Size:** Approximately 162kb  
- **Fluorophore:** Orange  
- **Location:** 11q13

**Probe 2:**  
- **Size:** Approximately 0.68kb  
- **Location:** CEN11q
Fluorophore: Green
Location: 11p11.11-q11

Origin: Human
Source: Genomic DNA

Regulation Status: For research use only (RUO)

Applications

Fluorescent In Situ Hybridization

Gene Information

Entrez GeneID: 595
Gene Name: CCND1
Gene Alias: BCL1,D11S287E,PRAD1,U21B31
Gene Description: cyclin D1
Omim ID: 151400, 168461, 193300, 254500

Gene Ontology: Hyperlink

Gene Summary: The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. Mutations, amplification and overexpression of this gene, which alters cell cycle progression, are observed frequently in a variety of tumors and may contribute to tumorigenesis. [provided by RefSeq]

Other Designations: B-cell CLL/lymphoma 1,G1/S-specific cyclin D1

Gene Pathway


Related Disease

Adenocarcinoma, Adenocarcinoma, Mucinous, Adenoma, Ataxia telangiectasia, Barrett Esophagus, Brain Neoplasms, Breast cancer, Breast Neoplasms, Male Carcinoma, Carcinoma in Situ, Carcinoma, Basal Cell Carcinoma, Hepatocellular Carcinoma, Non-Small-Cell Lung