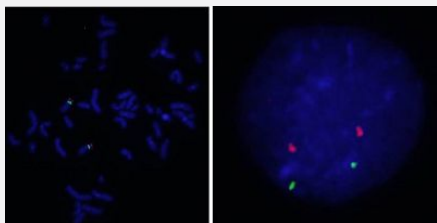


CCND2/CEN12p FISH Probe

Catalog # FG0155 Size 200 uL, 100 uL

Applications



Hybridization position of the probes on the chromosome.

Hybridization position of the probes on the chromosome.

Specification

Product Description	Labeled FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. (Technology).
Probe 1	Name: CCND2 Size: Approximately 120kb Fluorophore: Texas Red Location: 12p13.32
Probe 2	Name: CEN12p Size: Approximately 530kb Fluorophore: FITC Location: 12p11.22
Probe Gap	The gap between two probes is approximately 25,000 kb

Origin	Human
Source	Genomic DNA
Reactivity	Human
Form	Liquid
Notice	We strongly recommend the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: KA2375 or KA2691) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
Regulation Status	For research use only (RUO)
Quality Control Testing	Representative images of normal human cell (lymphocyte) stain with the dual color FISH probe. The left image is chromosomes at metaphase, and the right image is an interphase nucleus.
Supplied Product	DAPI Counterstain (1500 ng/mL) 125 uL for each 100 uL FISH Probe
Storage Instruction	Store at 4°C in the dark.
Note	Hybridization position of the probes on the chromosome. Hybridization position of the probes on the chromosome.

Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

Gene Info — CCND2

Entrez GeneID	894
Gene Name	CCND2
Gene Alias	KIAK0002, MGC102758
Gene Description	cyclin D2
Omim ID	123833
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 through 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 and be involved in the phosphorylation of tumor suppressor protein Rb. Knockout studies of the homologous gene in mouse suggest the essential roles of this gene in ovarian granulosa and germ cell proliferation. High level expression of this gene was observed in ovarian and testicular tumors. [provided by RefSeq]

Other Designations

G1/S-specific cyclin D2

Pathway

- [Cell cycle](#)
- [Focal adhesion](#)
- [Jak-STAT signaling pathway](#)
- [p53 signaling pathway](#)
- [Wnt signaling pathway](#)

Disease

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Diabetes Mellitus](#)
- [Genetic Predisposition to Disease](#)
- [Hepatitis B](#)
- [Kidney Failure](#)
- [Liver Neoplasms](#)
- [Narcolepsy](#)
- [Neoplasm Invasiveness](#)
- [Ovarian cancer](#)

- [Ovarian Neoplasms](#)