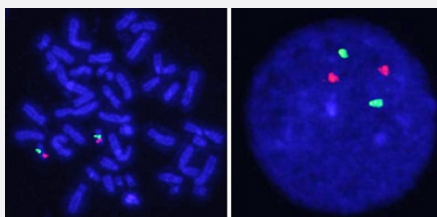


PPM1D/CEN17qFISH Probe

Catalog # FG0238

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: PPM1D
Size: Approximately 300kb
Fluorophore: Texas Red
Location: 17q23.2

Probe 2

Name: CEN17q
Size: Approximately 540kb
Fluorophore: FITC
Location: 17q11.2

Origin

Human

Source	Genomic DNA
Reactivity	Human
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.
Regulatory 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 — PPM1D

Entrez GeneID	8493
Gene Name	PPM1D
Gene Alias	PP2C-DELTA, WIP1
Gene Description	protein phosphatase 1D magnesium-dependent, delta isoform
Omim ID	114480 605100
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. The expression of this gene is induced in a p53-dependent manner in response to various environmental stresses. While being induced by tumor suppressor protein TP53/p53, this phosphatase negatively regulates the activity of p38 MAP kinase, MAPK/p38, through which it reduces the phosphorylation of p53, and in turn suppresses p53-mediated transcription and apoptosis. This phosphatase thus mediates a feedback regulation of p38-p53 signaling that contributes to growth inhibition and the suppression of stress induced apoptosis. This gene is located in a chromosomal region known to be amplified in breast cancer. The amplification of this gene has been detected in both breast cancer cell line and primary breast tumors, which suggests a role of this gene in cancer development. [provided by RefSeq]

Other Designations

p53-induced protein phosphatase 1|protein phosphatase 1D|protein phosphatase 2C delta isoform|protein phosphatase Wip1

Pathway

- [p53 signaling pathway](#)

Disease

- [Tobacco Use Disorder](#)