

PTPN1(Texas Red)/CEN20p(FITC) FISH Probe

Catalog # FA0607 Size 200 uL

Specification

Product Description	Made to order FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. (Technology).
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.
Regulation Status	For research use only (RUO)
Supplied Product	DAPI Counterstain (1500 ng/mL) 250 uL
Storage Instruction	Store at 4°C in the dark.

Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

Gene Info — PTPN1

Entrez GeneID	5770
Gene Name	PTPN1
Gene Alias	PTP1B
Gene Description	protein tyrosine phosphatase, non-receptor type 1

Omim ID [176885 609830](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is the founding member of the protein tyrosine phosphatase (PTP) family, which was isolated and identified based on its enzymatic activity and amino acid sequence. PTPs catalyze the hydrolysis of the phosphate monoesters specifically on tyrosine residues. Members of the PTP family share a highly conserved catalytic motif, which is essential for the catalytic activity. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP has been shown to act as a negative regulator of insulin signaling by dephosphorylating the phosphotyrosine residues of insulin receptor kinase. This PTP was also reported to dephosphorylate epidermal growth factor receptor kinase, as well as JAK2 and TYK2 kinases, which implicated the role of this PTP in cell growth control, and cell response to interferon stimulation. [provided by RefSeq]

Other Designations

OTTHUMP00000031266|non-receptor tyrosine phosphatase 1|protein tyrosine phosphatase 1B|protein tyrosine phosphatase, placental

Pathway

- [Adherens junction](#)
- [Insulin signaling pathway](#)

Disease

- [Albuminuria](#)
- [Alzheimer disease](#)
- [Arteriosclerosis](#)
- [Atherosclerosis](#)
- [Atrophy](#)
- [Calcinosis](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Cerebrovascular Disorders](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)

- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetic Angiopathies](#)
- [Diabetic Retinopathy](#)
- [Dyslipidemias](#)
- [Genetic Predisposition to Disease](#)
- [Glucose Intolerance](#)
- [Helicobacter Infections](#)
- [Hypertension](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Lymphoma](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Noonan Syndrome](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Neoplasms](#)
- [Peripheral Vascular Diseases](#)
- [Pulmonary Valve Stenosis](#)
- [Stomach Neoplasms](#)
- [Syndrome](#)