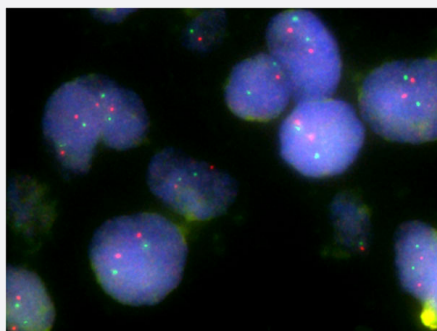


CYP2D6/CEN22q FISH Probe

Catalog # FG0081

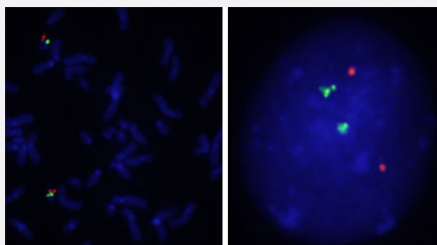
Size 200 uL, 100 uL

Applications



Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human breast cancer (FFPE) stained with CYP2D6/CEN22q FISH Probe. Human breast cancer showed no CYP2D6 gene amplification.



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: CYP2D6 Size: Approximately 130kb Fluorophore: Texas Red Location: 22q13.2
Probe 2	Name: CEN22q Size: Approximately 620kb Fluorophore: FITC Location: 22q11.22
Probe Gap	The gap between two probes is approximately 17,220 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](#)

- Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human breast cancer (FFPE) stained with CYP2D6/CEN22q FISH Probe. Human breast cancer showed no CYP2D6 gene amplification.

[Protocol Download](#)

Gene Info — CYP2D6

Entrez GeneID	1565
Gene Name	CYP2D6
Gene Alias	CPD6, CYP2D, CYP2D@, CYP2DL1, MGC120389, MGC120390, P450-DB1, P450C2D, P450 DB1
Gene Description	cytochrome P450, family 2, subfamily D, polypeptide 6
Omim ID	124030
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and is known to metabolize as many as 20% of commonly prescribed drugs. Its substrates include debrisoquine, an adrenergic-blocking drug; sparteine and propafenone, both anti-arrhythmic drugs; and amitriptyline, an anti-depressant. The gene is highly polymorphic in the population; certain alleles result in the poor metabolizer phenotype, characterized by a decreased ability to metabolize the enzyme's substrates. The gene is located near two cytochrome P450 pseudogenes on chromosome 22q13.1. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]
Other Designations	cytochrome P450 2D6 cytochrome P450, subfamily IID (debrisoquine, sparteine, etc., -metabolizing), polypeptide 6 cytochrome P450, subfamily IID (debrisoquine, sparteine, etc., -metabolizing)-like 1 debrisoquine 4-hydroxylase flavoprotein-linked monooxygen

Pathway

- [Biosynthesis of alkaloids derived from shikimate pathway](#)
- [Drug metabolism - cytochrome P450](#)

Disease

- [Abortion](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)

- [Agranulocytosis](#)
- [Akathisia](#)
- [Alcohol-Related Disorders](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Anemia](#)
- [Anxiety Disorders](#)
- [Apnea](#)
- [Arrhythmia](#)
- [Arthritis](#)
- [Asthma](#)
- [Atrial Fibrillation](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Balkan Nephropathy](#)
- [Basal Ganglia Diseases](#)
- [Birth Weight](#)
- [Bone Neoplasms](#)
- [Bradycardia](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Child Behavior Disorders](#)
- [Child Development Disorders](#)
- [Chromosome Aberrations](#)

- [Chromosome Deletion](#)
- [Chronic Disease](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Consciousness](#)
- [Coronary Artery Disease](#)
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- [Depression](#)
- [Depressive Disorder](#)
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- [Diabetes Mellitus](#)
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- [Disease Susceptibility](#)
- [Disorders of Excessive Somnolence](#)
- [DNA Damage](#)
- [Drug Toxicity](#)
- [Drug-Induced Liver Injury](#)
- [Ductus Arteriosus](#)
- [Dyskinesia](#)
- [Dyskinesias](#)

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- [Edema](#)
- [Epilepsy](#)
- [Fatigue](#)
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- [Infection](#)
- [Inflammation](#)
- [Insulin Resistance](#)
- [Kidney Diseases](#)

- [Kidney Failure](#)
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- [Leukemia](#)
- [Lewy Body Disease](#)
- [Lichen Planus](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Long QT syndrome](#)
- [Low Back Pain](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Manganese Poisoning](#)
- [Mental Disorders](#)
- [Metabolic Syndrome X](#)
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- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urticaria](#)
- [Uterine Cervical Neoplasms](#)
- [Ventricular Premature Complexes](#)
- [Vomiting](#)
- [Weight Gain](#)
- [Werner syndrome](#)