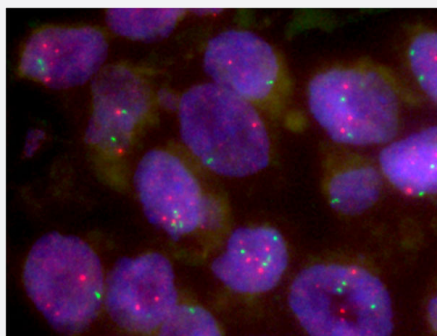


FGFR4/CEN5q FISH Probe

Catalog # FG0051

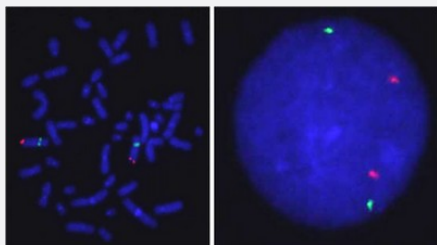
Size 200 uL, 100 uL

Applications



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

Human breast cancer (FFPE) stained with FGFR4/CEN5q FISH Probe. Human breast cancer showed no FGFR4 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: FGFR4 Size: Approximately 450kb Fluorophore: Texas Red Location: 5q35.1
Probe 2	Name: CEN5q Size: Approximately 700kb Fluorophore: FITC Location: 5q11.2
Probe Gap	The gap between two probes is approximately 123,600 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 FGFR4/CEN5q FISH Probe. Human breast cancer showed no FGFR4 gene amplification.

[Protocol Download](#)

Gene Info — FGFR4

Entrez GeneID [2264](#)

Gene Name FGFR4

Gene Alias CD334, JTK2, MGC20292, TKF

Gene Description fibroblast growth factor receptor 4

Omim ID [134935](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the fibroblast growth factor receptor family, where amino acid sequence is highly conserved between members and throughout evolution. FGFR family members differ from one another in their ligand affinities and tissue distribution. A full-length representative protein would consist of an extracellular region, composed of three immunoglobulin-like domains, a single hydrophobic membrane-spanning segment and a cytoplasmic tyrosine kinase domain. The extracellular portion of the protein interacts with fibroblast growth factors, setting in motion a cascade of downstream signals, ultimately influencing mitogenesis and differentiation. The genomic organization of this gene, compared to members 1-3, encompasses 18 exons rather than 19 or 20. Although alternative splicing has been observed, there is no evidence that the C-terminal half of the IgIII domain of this protein varies between three alternate forms, as indicated for members 1-3. This particular family member preferentially binds acidic fibroblast growth factor and, although its specific function is unknown, it is overexpressed in gynecological tumor samples, suggesting a role in breast and ovarian tumorigenesis. [provided by RefSeq]

Other Designations OTTHUMP00000161430|hydroxyaryl-protein kinase|protein-tyrosine kinase|tyrosine kinase related to fibroblast growth factor receptor|tyrosylprotein kinase

Pathway

- [Endocytosis](#)
- [MAPK signaling pathway](#)
- [Regulation of actin cytoskeleton](#)

Disease

- [ACTH-Secreting Pituitary Adenoma](#)
- [Adenocarcinoma](#)

- [Bone Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)
- [Carcinoma](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Disease Progression](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Hypersensitivity](#)
- [Irritable Bowel Syndrome](#)
- [Kidney Failure](#)
- [Liver Neoplasms](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Mouth Neoplasms](#)
- [Neoplasm Metastasis](#)
- [Pituitary ACTH Hypersecretion](#)
- [Pituitary Neoplasms](#)

- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Recurrence](#)
- [Sarcoma](#)
- [Skin Neoplasms](#)
- [Soft Tissue Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Urinary Bladder Neoplasms](#)