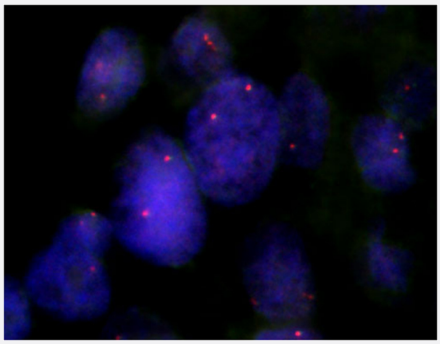
# FGFR3 Split FISH Probe

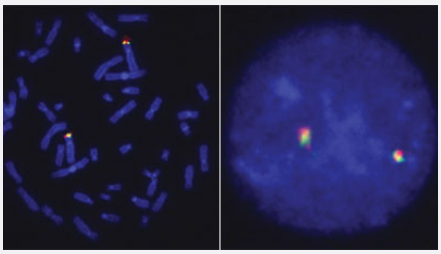
Catalog # FS0011 Size 200 uL, 100 uL

## Applications



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

Huma lung, adenosquamous cell carcinoma (FFPE) stained with FGFR3 Split FISH Probe. Human lung, adenosquamous cell carcinoma showed no FGFR3 gene split.



### Hybridization position of the probes on the chromosome:

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## Specification

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|---|---|
| **Product Description** | Labeled FISH probes for identification of gene split using Fluorescent In Situ Hybridization Technique. (Technology). |

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|---|---|
| **Probe 1** | **Name:** FGFR3(Texas Red)<br>**Size:** Approximately 700kb<br>**Fluorophore:** Texas Red<br>**Location:** 4p16.3 |
| **Probe 2** | **Name:** FGFR3(FITC)<br>**Size:** Approximately 500kb<br>**Fluorophore:** FITC<br>**Location:** 4p16.3 |
| **Probe Gap** | The gap between two probes is approximately 30 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 l eft 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:<br>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)

  Huma lung, adenosquamous cell carcinoma (FFPE) stained with FGFR3 Split FISH Probe. Human lung, adenosquamous cell carcinoma showed no FGFR3 gene split.

  Protocol Download

## Gene Info — FGFR3

| | |
|---|---|
| **Entrez GeneID** | 2261 |
| **Gene Name** | FGFR3 |
| **Gene Alias** | ACH, CD333, CEK2, HSFGFR3EX, JTK4 |
| **Gene Description** | fibroblast growth factor receptor 3 |
| **Omim ID** | 100800 109800 134934 146000 149730 162900 187600 602849 603956 610474 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | This gene encodes a member of the fibroblast growth factor receptor (FGFR) family, with its amino acid sequence being highly conserved between members and among divergent species. 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. This particular family member binds acidic and basic fibroblast growth hormone and plays a role in bone development and maintenance. Mutations in this gene lead to craniosynostosis and multiple types of skeletal dysplasia. Three alternatively spliced transcript variants that encode different protein isoforms have been described. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000149959\|achondroplasia, thanatophoric dwarfism\|hydroxyaryl-protein kinase\|tyrosine kinase JTK4 |

## Pathway

- Bladder cancer
- Endocytosis
- MAPK signaling pathway
- Pathways in cancer
- Regulation of actin cytoskeleton

## Disease

- Achondroplasia

- Alzheimer disease
- Carcinoma
- Cardiovascular Diseases
- Cheilitis
- Chromosome Aberrations
- Chromosome Deletion
- Cleft Lip
- Cleft Palate
- Colon cancer
- Colonic Neoplasms
- Craniosynostoses
- Diabetes Complications
- Disease Progression
- Genetic Diseases
- Genetic Predisposition to Disease
- Intracranial Hypertension
- Kidney Neoplasms
- Lung Neoplasms
- Metabolic Syndrome X
- Musculoskeletal Abnormalities
- Neoplasm Invasiveness
- Neoplasm Recurrence
- Neoplasms
- Osteochondrodysplasias
- Osteoporosis
- Pancreatic cancer

- Pancreatic Neoplasms
- Prostate cancer
- Prostatic Neoplasms
- Recurrence
- Skin Neoplasms
- Sleep Apnea
- Syndrome
- Thanatophoric Dysplasia
- Ureteral Neoplasms
- Urinary Bladder Neoplasms