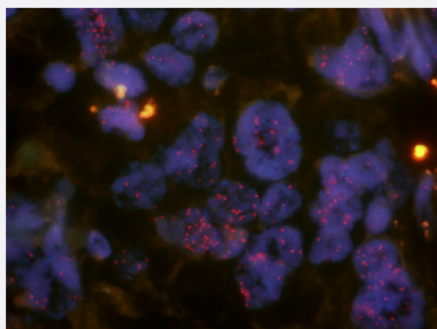


FGFR2/CEN10p FISH Probe

Catalog # FG0018

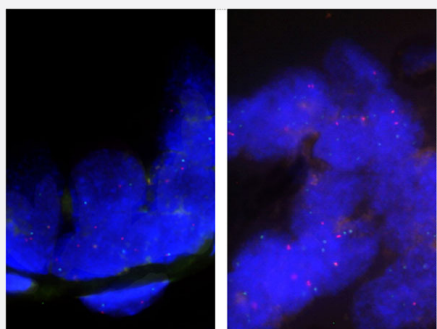
Size 200 uL, 100 uL

Applications



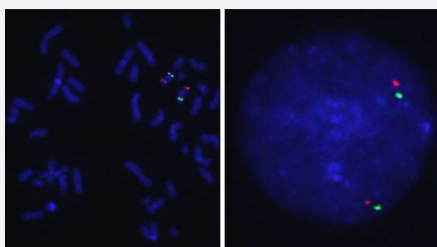
Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human stomach carcinoma (FFPE) stained with FGFR2/CEN10p FISH Probe. Human stomach carcinoma showed FGFR2 gene amplification.



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

Human breast cancer (FFPE) stained with FGFR2/CEN10p FISH Probe. Left: Human breast cancer showed no FGFR2 gene amplification. Right: Human breast cancer showed FGFR2 gene amplification (FGFR2/CEN10p ratio ≥ 2).



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: FGFR2 Size: Approximately 330kb Fluorophore: Texas Red Location: 10q26
Probe 2	Name: CEN10p Size: Approximately 640kb Fluorophore: FITC Location: 10p11.22
Probe Gap	The gap between two probes is approximately 91,200 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 stomach carcinoma (FFPE) stained with FGFR2/CEN10p FISH Probe. Human stomach carcinoma showed FGFR2 gene amplification.

[Protocol Download](#)

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

Human breast cancer (FFPE) stained with FGFR2/CEN10p FISH Probe. Left: Human breast cancer showed no FGFR2 gene amplification. Right: Human breast cancer showed FGFR2 gene amplification (FGFR2/CEN10p ratio ≥ 2).

[Protocol Download](#)

Gene Info — FGFR2

Entrez GeneID	2263
Gene Name	FGFR2
Gene Alias	BEK, BFR-1, CD332, CEK3, CFD1, ECT1, FLJ98662, JWS, K-SAM, KGFR, TK14, TK25
Gene Description	fibroblast growth factor receptor 2
Omim ID	101200 101400 101600 123150 123500 123790 137215 149730 176943 207410
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 consists 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 is a high-affinity receptor for acidic, basic and/or keratinocyte growth factor, depending on the isoform. Mutations in this gene are associated with Crouzon syndrome, Pfeiffer syndrome, Craniosynostosis, Apert syndrome, Jackson-Weiss syndrome, Beare-Stevenson cutis gyrata syndrome, Saethre-Chotzen syndrome, and syndromic craniosynostosis. Multiple alternatively spliced transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq]

Other Designations

BEK fibroblast growth factor receptor|FGF receptor|OTTHUMP00000020621|OTTHUMP00000020629|bacteria-expressed kinase|hydroxyaryl-protein kinase|keratinocyte growth factor receptor|protein tyrosine kinase, receptor like 14|soluble FGFR4 variant 4

Publication Reference

- [3D FISH to analyse gene domain-specific chromatin re-modeling in human cancer cell lines.](#)

Kocanova S, Goiffon I, Bystricky K.

Methods 2018 Jun; 142:3.

- [Low Prognostic Implication of Fibroblast Growth Factor Family Activation in Triple-negative Breast Cancer Subsets.](#)

Lee HJ, Seo AN, Park SY, Kim JY, Park JY, Yu JH, Ahn JH, Gong G.

Annals of Surgical Oncology 2014 May; 21(5):1561.

Application: FISH, Human, Triple-negative breast cancer

- [EGFR2 gene amplification and clinicopathological features in gastric cancer.](#)

Matsumoto K, Arao T, Hamaguchi T, Shimada Y, Kato K, Oda I, Taniguchi H, Koizumi F, Yanagihara K, Sasaki H, Nishio K, Yamada Y.

British Journal of Cancer 2012 Feb; 106(4):727.

Application: FISH, Human, Human gastric cancer

Pathway

- [Endocytosis](#)
- [MAPK signaling pathway](#)

- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)

Disease

- [Acrocephalosyndactylia](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Birth Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchial Hyperreactivity](#)
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