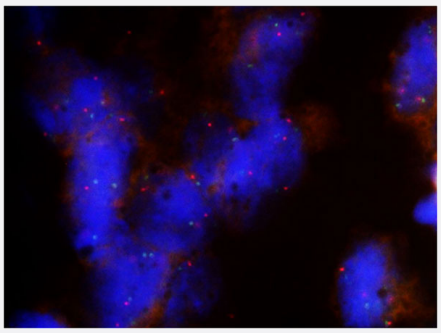
Sm Size

EGFR/CEN7q FISH Probe

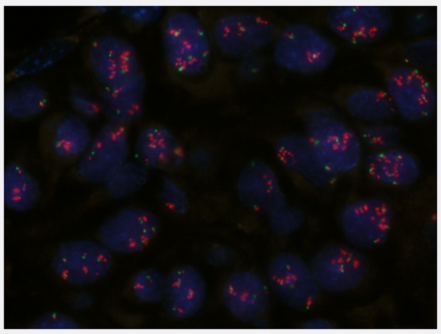
Catalog # FG0005 Size 200 uL, 100 uL

Applications



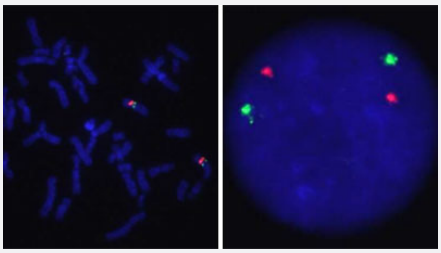
Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human breast cancer (FFPE) stained with EGFR/CEN7q FISH Probe. Human breast cancer showed no EGFR gene amplification.



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

Human squamous cell carcinoma (FFPE) stained with EGFR/CEN7q FISH Probe. Human squamous cell carcinoma showed EGFR gene amplification.



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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 T echnique. (Technology).
Probe 1	**Name:** EGFR **Size:** Approximately 300kb **Fluorophore:** Texas Red **Location:** 7p12
Probe 2	**Name:** CEN7q **Size:** Approximately 820kb **Fluorophore:** FITC **Location:** 7q11.21
Probe Gap	The gap between two probes is approximately 8,900 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 Products	DAPI Counterstain (1500 ng/mL) 125 uL for each 100 uL FISH Probe
Storage Instruction	Store at 4°C in the dark.

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Note	Hybridization position of the probes on the chromosome. Hybridization position of the probes on the chromosome.
Self-Attestation	Abnova self-attests to comply with the U.S. Framework for Nucleic Acid Synthesis Screening

Applications

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

  Human breast cancer (FFPE) stained with EGFR/CEN7q FISH Probe. Human breast cancer showed no EGFR gene amplification.

  Protocol Download

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

  Human squamous cell carcinoma (FFPE) stained with EGFR/CEN7q FISH Probe. Human squamous cell carcinoma showed EGFR gene amplification.

  Protocol Download

- Fluorescent In Situ Hybridization (Cell)

  Protocol Download

Gene Info — EGFR

Entrez GeneID	1956
Gene Name	EGFR
Gene Alias	ERBB, ERBB1, HER1, PIG61, mENA
Gene Description	epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian)
Omim ID	131550 211980
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a transmembrane glycoprotein that is a member of the protei n kinase superfamily. This protein is a receptor for members of the epidermal growth factor family. EGFR is a cell surface protein that binds to epidermal growth factor. Binding of the protein to a lig and induces receptor dimerization and tyrosine autophosphorylation and leads to cell proliferation . Mutations in this gene are associated with lung cancer. [provided by RefSeq

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Other Designations	avian erythroblastic leukemia viral (v-erb-b) oncogene homolog|cell growth inhibiting protein 40|cell proliferation-inducing protein 61|epidermal growth factor receptor

Publication Reference

- Acquired RAS or EGFR mutations and duration of response to EGFR blockade in colorectal cancer.

  Van Emburgh BO, Arena S, Siravegna G, Lazzari L, Crisafulli G, Corti G, Mussolin B, Baldi F, Buscarino M, Bartolini A, Valtorta E, Vidal J, Bellosillo B, Germano G, Pietrantonio F, Ponzetti A, Albanell J, Siena S, Sartore-Bianchi A, Di Nicolantonio F, Montagut C, Bardelli A.

  Nature Communications 2016 Dec; 7:13665.

  Application: FISH, Human, LIM1215 CRC cells

Pathway

- Adherens junction
- Bladder cancer
- Calcium signaling pathway
- Colorectal cancer
- Cytokine-cytokine receptor interaction
- Dorso-ventral axis formation
- Endocytosis
- Endometrial cancer
- Epithelial cell signaling in Helicobacter pylori infection
- ErbB signaling pathway
- Focal adhesion
- Gap junction
- Glioma
- GnRH signaling pathway
- MAPK signaling pathway
- Melanoma

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- Non-small cell lung cancer
- Pancreatic cancer
- Pathways in cancer
- Prostate cancer
- Regulation of actin cytoskeleton

Disease

- Adenocarcinoma
- Anus Neoplasms
- Asthma
- Astrocytoma
- Atherosclerosis
- Barrett Esophagus
- Bile Duct Neoplasms
- Biliary Tract Neoplasms
- Bipolar Disorder
- Brain Neoplasms
- Breast cancer
- Breast Neoplasms
- Bronchial Hyperreactivity
- Carcinoma
- Cardiomyopathy
- Cardiovascular Diseases
- Cell Transformation
- Central Nervous System Neoplasms
- Cervical Intraepithelial Neoplasia

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- Cholangiocarcinoma
- Chromosome Aberrations
- Chromosome Deletion
- Cleft Lip
- Cleft Palate
- Cocarcinogenesis
- Colon cancer
- Colonic Neoplasms
- Colorectal Neoplasms
- Cystadenocarcinoma
- Diabetes Mellitus
- Diarrhea
- Disease Progression
- Disease Susceptibility
- DNA Damage
- Drug Eruptions
- Drug Toxicity
- Edema
- Endometrial Neoplasms
- Endometriosis
- Esophageal Neoplasms
- Exanthema
- Genetic Diseases
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma

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- Head and Neck Neoplasms
- Hepatitis C
- HIV Infections
- Hyperparathyroidism
- Hypersensitivity
- Hypopharyngeal Neoplasms
- Kidney Failure
- Kidney Neoplasms
- Liver Diseases
- Liver Neoplasms
- Lung carcinoma
- Lung Neoplasms
- Lupus Erythematosus
- Lymphatic Metastasis
- Mental Disorders
- Mouth Neoplasms
- Myoma
- Nasopharyngeal Neoplasms
- Neoplasm Invasiveness
- Neoplasm Metastasis
- Neoplasm Recurrence
- Neoplasms
- Osteosarcoma
- Otorhinolaryngologic Neoplasms
- Ovarian cancer
- Ovarian Neoplasms

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- Pancreatic cancer
- Pancreatic Neoplasms
- Papillomavirus Infections
- Polycystic Kidney
- Polycystic kidney disease
- Precancerous Conditions
- Prostate cancer
- Prostatic Hyperplasia
- Prostatic Neoplasms
- Pulmonary Disease
- Ras oncogene
- Rectal Neoplasms
- Recurrence
- Skin Neoplasms
- Small Cell Lung Carcinoma
- Stomach Neoplasms
- Thyroid Neoplasms
- Tongue Neoplasms
- Tonsillar Neoplasms
- Urinary Bladder Neoplasms
- Urinary Calculi
- Uterine Cervical Neoplasms
- Uterine Neoplasms
- Viremia
- Werner syndrome

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