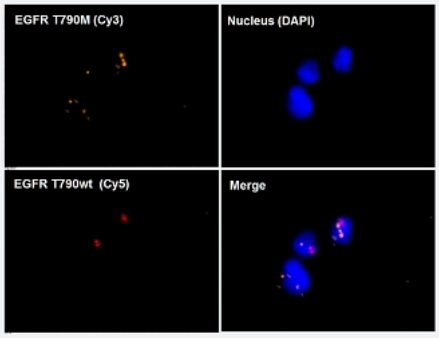
mutaFISH™ EGFR T790M T790wt RNA Probes

Catalog # FP0001 Size 1 Probe Set

Applications



mutation specific, Fluorescence *In Situ* Hybridization (Cells)

mutaFISH™ staining was performed *in situ* in human H1975 cells captured by CytoQuest™ CR. EGFR T790M point mutation was detected via orange signal (Cy3), and EGFR T790wt was detected via red signal (Cy5).

Specification

Product Description	mutaFISH™ EGFR T790M T790wt RNA Probes is designed to detect human EGFR T790M gene m utation on single strand RNA in cells using padlock probe and *in situ* rolling-circle amplification techn ology.
Reactivity	Human
Supplied Products	Content: 1. RT EGFR T790 Primer 2. mutaFISH™ EGFR T790M RNA Probe 3. mutaFISH™ EGFR T790wt RNA Probe 4. Detection Probe-Aqua 431 5. Detection Probe-Texas Red X
Technology	mutaFISH™ (mutation-specific Fluorescence *In Situ* Hybridization)
Comparison	FISH Probes vs mutaFISH™ Probes

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Fluorophore	Aqua 431 (Excitation Peak (nm): 431; Emission Peak (nm): 480) Texas Red X (Excitation Peak (nm): 595; Emission Peak 613)
Probe Position	
Regulatory Status	For research use only (RUO)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	We recommend mutaFISH™ RNA Accessory Kit (Catalog #: KA4915) which provides necessary re agents and enzymes for *in situ* reverse transcription, RNA digestion, mutaFISH™ hybridization, ligati on and amplication prior to mutaFISH™.
Self-Attestation	Abnova self-attests to comply with the U.S. Framework for Nucleic Acid Synthesis Screening
Video	

Applications

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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

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

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
- Non-small cell lung cancer
- Pancreatic cancer
- Pathways in cancer

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- 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
- Cholangiocarcinoma
- Chromosome Aberrations

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- 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
- Head and Neck Neoplasms
- Hepatitis C

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- 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
- Pancreatic cancer
- Pancreatic Neoplasms

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- 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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