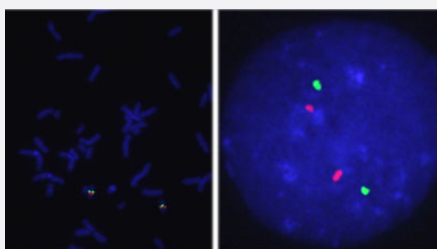


# BRCA1/CEN17q FISH Probe

Catalog # FG0069

Size 200 uL, 100 uL

## Applications



Hybridization position of the probes on the chromosome:

Hybridization position of the probes on the chromosome:

## Specification

|                            |                                                                                                                                                 |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b> | Labeled FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. ( <a href="#">Technology</a> ). |
| <b>Probe 1</b>             | <b>Name:</b> BRCA1<br><b>Size:</b> Approximately 150kb<br><b>Fluorophore:</b> Texas Red<br><b>Location:</b> 17q21.31                            |
| <b>Probe 2</b>             | <b>Name:</b> CEN17q<br><b>Size:</b> Approximately 540kb<br><b>Fluorophore:</b> FITC<br><b>Location:</b> 17q11.2                                 |
| <b>Probe Gap</b>           | The gap between two probes is approximately 9,200 kb.                                                                                           |

|                         |                                                                                                                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Origin                  | Human                                                                                                                                                                                                                         |
| Source                  | Genomic DNA                                                                                                                                                                                                                   |
| Reactivity              | Human                                                                                                                                                                                                                         |
| Form                    | Liquid                                                                                                                                                                                                                        |
| Notice                  | We <b>strongly recommend</b> the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: <a href="#">KA2375</a> or <a href="#">KA2691</a> ) 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:<br>Hybridization position of the probes on the chromosome:                                                                                                            |

## Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

## Gene Info — BRCA1

|                  |                                 |
|------------------|---------------------------------|
| Entrez GeneID    | <a href="#">672</a>             |
| Gene Name        | BRCA1                           |
| Gene Alias       | BRCAI, BRCC1, IRIS, PSCP, RNF53 |
| Gene Description | breast cancer 1, early onset    |
| Omim ID          | <a href="#">113705</a>          |
| Gene Ontology    | <a href="#">Hyperlink</a>       |

**Gene Summary**

This gene encodes a nuclear phosphoprotein that plays a role in maintaining genomic stability, and it also acts as a tumor suppressor. The encoded protein combines with other tumor suppressors, DNA damage sensors, and signal transducers to form a large multi-subunit protein complex known as the BRCA1-associated genome surveillance complex (BASC). This gene product associates with RNA polymerase II, and through the C-terminal domain, also interacts with histone deacetylase complexes. This protein thus plays a role in transcription, DNA repair of double-stranded breaks, and recombination. Mutations in this gene are responsible for approximately 40% of inherited breast cancers and more than 80% of inherited breast and ovarian cancers. Alternative splicing plays a role in modulating the subcellular localization and physiological function of this gene. Many alternatively spliced transcript variants, some of which are disease-associated mutations, have been described for this gene, but the full-length nature of only some of these variants has been described. A related pseudogene, which is also located on chromosome 17, has been identified. [provided by RefSeq]

**Other Designations**

BRCA1/BRCA2-containing complex, subunit 1|breast and ovarian cancer susceptibility protein 1

**Pathway**

- [Ubiquitin mediated proteolysis](#)

**Disease**

- [Abdominal Neoplasms](#)
- [Abortion](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Anticipation](#)
- [Anxiety Disorders](#)
- [Ataxia telangiectasia](#)
- [Awareness](#)
- [Bloom Syndrome](#)
- [Body Image](#)
- [Body Weight](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)

- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Carcinoma in Situ](#)
- [Cell Transformation](#)
- [Choice Behavior](#)
- [Chromosome Aberrations](#)
- [Chromosome Breakage](#)
- [Chromosome Deletion](#)
- [Cocarcinogenesis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Concept Formation](#)
- [Counseling](#)
- [Cystadenocarcinoma](#)
- [Decision Making](#)
- [Discrimination \(Psychology\)](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fallopian Tube Neoplasms](#)
- [Fanconi Anemia](#)
- [Fatigue](#)
- [Functional Laterality](#)
- [Genetic Diseases](#)

- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hamartoma Syndrome](#)
- [Hematologic Diseases](#)
- [Hodgkin Disease](#)
- [Hyperplasia](#)
- [Hyperthyroidism](#)
- [Infertility](#)
- [Kidney Failure](#)
- [Knowledge of Results \(Psychology\)](#)
- [Leukemia](#)
- [Li-Fraumeni Syndrome](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningomyelocele](#)
- [Menopause](#)
- [Microsatellite Instability](#)
- [Multiple Sclerosis](#)
- [Narcolepsy](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)

- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplastic Syndromes](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Ovarian cancer](#)
- [Ovarian Diseases](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Papillomavirus Infections](#)
- [Perception](#)
- [Peritoneal Neoplasms](#)
- [Personal Autonomy](#)
- [Personality Inventory](#)
- [Peutz-Jeghers Syndrome](#)
- [Precancerous Conditions](#)
- [Pregnancy Complications](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Psychological Tests](#)
- [Psychology](#)
- [Psychometrics](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)
- [Recurrence](#)

- [Salivary Gland Neoplasms](#)
- [Skin Neoplasms](#)
- [Sleep](#)
- [Sleep Disorders](#)
- [Spinal Dysraphism](#)
- [Spinocerebellar ataxia](#)
- [Stomach Neoplasms](#)
- [Stress](#)
- [Tay-Sachs disease](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)