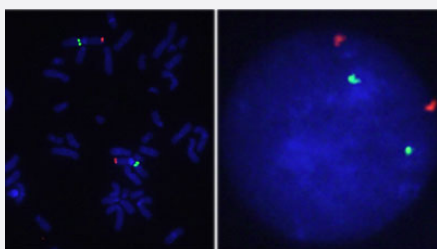


# AKT3/CEN1q FISH Probe

Catalog # FG0067

Size 200 uL, 100 uL

## Applications



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:** AKT3  
**Size:** Approximately 600kb  
**Fluorophore:** Texas Red  
**Location:** 1q43-q44

### Probe 2

**Name:** CEN1q  
**Size:** Approximately 600kb  
**Fluorophore:** FITC  
**Location:** 1q21.3

### Probe Gap

The gap between two probes is approximately 88,900 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: Hybridization position of the probes on the chromosome:

## Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

## Gene Info — AKT3

Entrez GeneID	<a href="#">10000</a>
Gene Name	AKT3
Gene Alias	DKFZp434N0250, PKB-GAMMA, PKBG, PRKBG, RAC-PK-gamma, RAC-gamma, STK-2
Gene Description	v-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma)
Omim ID	<a href="#">611223</a>
Gene Ontology	<a href="#">Hyperlink</a>

## Gene Summary

The protein encoded by this gene is a member of the AKT, also called PKB, serine/threonine protein kinase family. AKT kinases are known to be regulators of cell signaling in response to insulin and growth factors. They are involved in a wide variety of biological processes including cell proliferation, differentiation, apoptosis, tumorigenesis, as well as glycogen synthesis and glucose uptake. This kinase has been shown to be stimulated by platelet-derived growth factor (PDGF), insulin, and insulin-like growth factor 1 (IGF1). Alternatively splice transcript variants encoding distinct isoforms have been described. [provided by RefSeq]

## Other Designations

OTTHUMP00000037911|OTTHUMP00000037912|RAC-gamma serine/threonine protein kinase|protein kinase B gamma|serine threonine protein kinase, Akt-3|v-akt murine thymoma viral oncogene homolog 3

## Publication Reference

- [Investigation of molecular alterations of AKT-3 in triple-negative breast cancer.](#)

O'Hurley G, Daly E, O'Grady A, Cummins R, Quinn C, Flanagan L, Pierce A, Fan Y, Lynn MA, Rafferty M, Fitzgerald D, Pontani F, Duffy MJ, Jirstrom K, Kay EW, Gallagher WM.

Histopathology 2014 Apr; 64(5):660.

Application: FISH, Human, Breast cancer

## Pathway

- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)

- [Glioma](#)
- [Insulin signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Renal cell carcinoma](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)

## Disease

- [Adenocarcinoma](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Multiple Sclerosis](#)

- [Thyroid Neoplasms](#)
- [Urinary Bladder Neoplasms](#)