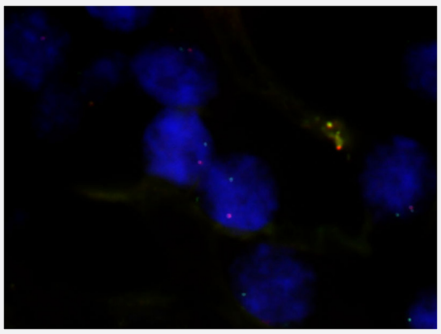
VHL/CEN3q FISH Probe

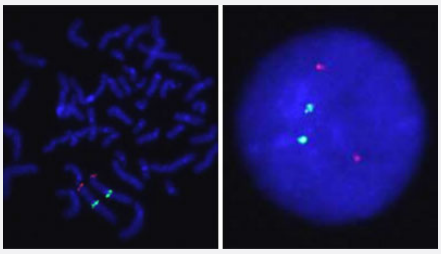
Catalog # FG0029 Size 100 uL, 200 uL

Applications



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

Human renal cell carcinoma (FFPE) stained with VHL/CEN3q FISH Probe. Human renal cell carcinoma showed no VHL gene amplification.



Hybridization position of the probes on the chromosome.

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Specification

Product Description	Labeled FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization T echnique. (Technology).

Probe 1	**Name:** VHL **Size:** Approximately 170kb **Fluorophore:** Texas Red **Location:** 3p26-p25
Probe 2	**Name:** CEN3q **Size:** Approximately 500kb **Fluorophore:** FITC **Location:** 3q12.1
Probe Gap	The gap between two probes is approximately 85,100 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 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 renal cell carcinoma (FFPE) stained with VHL/CEN3q FISH Probe. Human renal cell carcinoma showed no VHL gene amplification.

  Protocol Download

Gene Info — VHL

Entrez GeneID	7428
Gene Name	VHL
Gene Alias	HRCA1, RCA1, VHL1
Gene Description	von Hippel-Lindau tumor suppressor
Omim ID	144700 171300 193300 263400 608537
Gene Ontology	Hyperlink
Gene Summary	Von Hippel-Lindau syndrome (VHL) is a dominantly inherited familial cancer syndrome predisposing to a variety of malignant and benign tumors. A germline mutation of this gene is the basis of familial inheritance of VHL syndrome. The protein encoded by this gene is a component of the protein complex that includes elongin B, elongin C, and cullin-2, and possesses ubiquitin ligase E3 activity. This protein is involved in the ubiquitination and degradation of hypoxia-inducible-factor (HIF), which is a transcription factor that plays a central role in the regulation of gene expression by oxygen. RNA polymerase II subunit POLR2G/RPB7 is also reported to be a target of this protein. Alternatively spliced transcript variants encoding distinct isoforms have been observed. [provided by RefSeq
Other Designations	elongin binding protein

Pathway

- Pathways in cancer
- Renal cell carcinoma
- Ubiquitin mediated proteolysis

Disease

- Adenocarcinoma
- Adrenal Gland Neoplasms
- Altitude Sickness
- Anoxia
- Breast cancer

- Breast Neoplasms
- Carcinoma
- Cardiovascular Diseases
- Central Nervous System Neoplasms
- Cerebellar Neoplasms
- Diabetes Mellitus
- Edema
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- Glomus Tumor
- Head and Neck Neoplasms
- Hemangioblastoma
- Hemangioma
- Hippel-Lindau Disease
- Hypertension
- Kidney Neoplasms
- Lymphoproliferative Disorders
- Multiple endocrine neoplasia
- Multiple Endocrine Neoplasia Type 2a
- Myelodysplastic Syndromes
- Neoplasms
- Neurofibromatosis
- Pancreatic cancer
- Pancreatic Neoplasms
- Paraganglioma
- Pheochromocytoma

- Polycythemia
- Retinal Neoplasms
- Syndrome
- Thrombosis
- Vascular Diseases
- von Hippel-Lindau Disease
- Von Hippel-Lindau syndrome