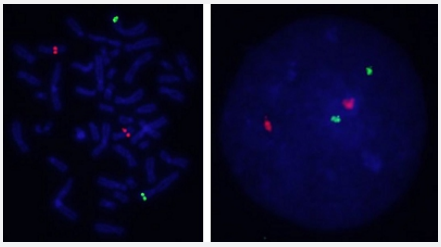
Sm Size

VCL/ALK DY Translocation FISH Probe

Catalog # FT0019 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 transloaction using Fluorescent In Situ Hybridization T echnique. (Technology).
Probe 1	**Name:** VCL **Size:** Approximately 1,140kb **Fluorophore:** Texas Red **Location:** 10q22.1-23
Probe 2	**Name:** ALK **Size:** Approximately 1,220kb **Fluorophore:** FITC **Location:** 2p23
Origin	Human

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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.
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 (Cell)

  Protocol Download

Gene Info — ALK

Entrez GeneID	238
Gene Name	ALK
Gene Alias	CD246, Ki-1, TFG/ALK
Gene Description	anaplastic lymphoma receptor tyrosine kinase
Omim ID	105590
Gene Ontology	Hyperlink

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Gene Summary	The 2;5 chromosomal translocation is frequently associated with anaplastic large cell lymphomas (ALCLs). The translocation creates a fusion gene consisting of the ALK (anaplastic lymphoma kin ase) gene and the nucleophosmin (NPM) gene: the 3' half of ALK, derived from chromosome 2, is fused to the 5' portion of NPM from chromosome 5. A recent study shows that the product of the N PM-ALK fusion gene is oncogenic. The deduced amino acid sequences reveal that ALK is a nov el receptor protein-tyrosine kinase having a putative transmembrane domain and an extracellular domain. These sequences are absent in the product of the transforming NPM-ALK gene. ALK sh ows the greatest sequence similarity to LTK (leukocyte tyrosine kinase). ALK plays an important r ole in the development of the brain and exerts its effects on specific neurons in the nervous syste m. [provided by RefSeq
Other Designations	ALK tyrosine kinase receptor|CD246 antigen|anaplastic lymphoma kinase (Ki-1)|anaplastic lymph oma kinase Ki-1

Gene Info — VCL

Entrez GeneID	7414
Gene Name	VCL
Gene Alias	CMD1W, MVCL
Gene Description	vinculin
Omim ID	193065 611407
Gene Ontology	Hyperlink
Gene Summary	Vinculin is a cytoskeletal protein associated with cell-cell and cell-matrix junctions, where it is thou ght to function as one of several interacting proteins involved in anchoring F-actin to the membran e. Defects in VCL are the cause of cardiomyopathy dilated type 1W. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestiv e heart failure and arrhythmia. Multiple alternatively spliced transcript variants have been found for this gene, but the biological validity of some variants has not been determined. [provided by RefS eq
Other Designations	OTTHUMP00000019861|OTTHUMP00000043885|metavinculin

Pathway

- Adherens junction
- Focal adhesion
- Leukocyte transendothelial migration
- Regulation of actin cytoskeleton

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Disease

- Adenocarcinoma
- Alzheimer Disease
- Carcinoma
- Cardiomyopathy
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Kidney Failure
- Lung Neoplasms
- Multiple Sclerosis
- Schizophrenia
- Tobacco Use Disorder

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