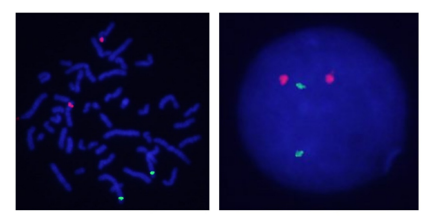
CBX3/ALK DY Translocation FISH Probe

Catalog # FT0045 Size 200 uL

Applications



Hybridization position of the probes on the chromosome.

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Specification

Product Description	Labeled FISH probes for identification of gene translocation using Fluorescent In Situ Hybridization T echnique. (Technology).
Probe 1	**Name:** CBX3 **Size:** Approximately 620kb **Fluorophore:** Texas Red **Location:** 7p15.2
Probe 2	**Name:** ALK **Size:** Approximately 700kb **Fluorophore:** FITC **Location:** 2p23
Origin	Human

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Source	Genomic DNA
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.
Regulatory 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.
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 — CBX3

Entrez GeneID	11335
Gene Name	CBX3
Gene Alias	HECH, HP1-GAMMA, HP1Hs-gamma
Gene Description	chromobox homolog 3 (HP1 gamma homolog, Drosophila)
Omim ID	604477
Gene Ontology	Hyperlink
Gene Summary	At the nuclear envelope, the nuclear lamina and heterochromatin are adjacent to the inner nuclear membrane. The protein encoded by this gene binds DNA and is a component of heterochromatin. This protein also can bind lamin B receptor, an integral membrane protein found in the inner nucle ar membrane. The dual binding functions of the encoded protein may explain the association of h eterochromatin with the inner nuclear membrane. Two transcript variants encoding the same prote in but differing in the 5' UTR, have been found for this gene. [provided by RefSeq
Other Designations	HP1 gamma homolog|OTTHUMP00000024529|OTTHUMP00000122519|chromobox homolog 3| heterochromatin protein HP1 gamma|heterochromatin-like protein 1

Disease

- Adenocarcinoma
- Carcinoma
- Genetic Predisposition to Disease
- Kidney Failure

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- Lung Neoplasms
- Multiple Sclerosis
- Schizophrenia
- Tobacco Use Disorder

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