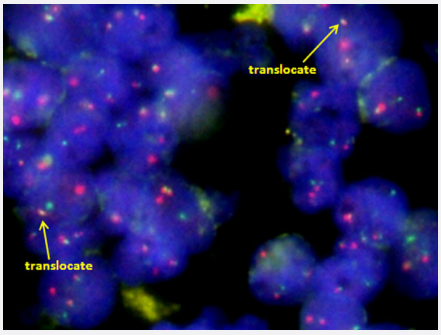
Sm Size

bcr/abl DY Translocation FISH Probe

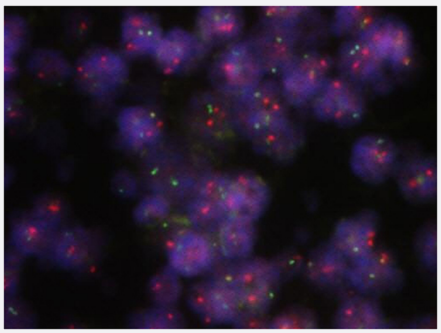
Catalog # FT0002 Size 200 uL, 100 uL

Applications



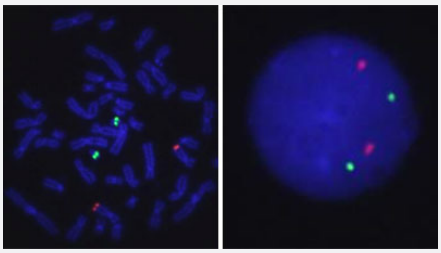
Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human CML (FFPE) stained with bcr/abl DY Translocation FISH Probe.
Human CML showed bcr/abl gene translocation.



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

Human lymph node (FFPE) stained with bcr/abl DY Translocation FISH Probe.
Human lymph node cancer showed no bcr/abl DY Translocation.



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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 translocation using Fluorescent In Situ Hybridization T echnique. (Technology).
Probe 1	**Name:** BCR **Size:** Approximately 1520kb **Fluorophore:** FITC **Location:** 22q11.23
Probe 2	**Name:** ABL **Size:** Approximately 780kb **Fluorophore:** Texas Red **Location:** 9q34.1
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

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Applications

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

  Human CML (FFPE) stained with bcr/abl DY Translocation FISH Probe. Human CML showed bcr/abl gene translocation.

  Protocol Download

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

  Human lymph node (FFPE) stained with bcr/abl DY Translocation FISH Probe. Human lymph node cancer showed no bcr/abl DY Translocation.

  Protocol Download

- Fluorescent In Situ Hybridization (Cell)

  Protocol Download

Gene Info — ABL1

Entrez GeneID	25
Gene Name	ABL1
Gene Alias	ABL, JTK7, bcr/abl, c-ABL, p150, v-abl
Gene Description	c-abl oncogene 1, receptor tyrosine kinase
Omim ID	189980
Gene Ontology	Hyperlink
Gene Summary	The ABL1 protooncogene encodes a cytoplasmic and nuclear protein tyrosine kinase that has be en implicated in processes of cell differentiation, cell division, cell adhesion, and stress response. Activity of c-Abl protein is negatively regulated by its SH3 domain, and deletion of the SH3 domai n turns ABL1 into an oncogene. The t(9;22) translocation results in the head-to-tail fusion of the B CR (MIM:151410) and ABL1 genes present in many cases of chronic myelogeneous leukemia. T he DNA-binding activity of the ubiquitously expressed ABL1 tyrosine kinase is regulated by CDC 2-mediated phosphorylation, suggesting a cell cycle function for ABL1. The ABL1 gene is expres sed as either a 6- or 7-kb mRNA transcript, with alternatively spliced first exons spliced to the com mon exons 2-11. [provided by RefSeq
Other Designations	Abelson murine leukemia viral (v-abl) oncogene homolog 1|OTTHUMP00000022375|OTTHUMP0 0000022376|bcr/c-abl oncogene protein|proto-oncogene tyrosine-protein kinase ABL1|v-abl Abel son murine leukemia viral oncogene homolog 1

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Gene Info — BCR

Entrez GeneID	613
Gene Name	BCR
Gene Alias	ALL, BCR-ABL1, BCR1, CML, D22S11, D22S662, FLJ16453, PHL
Gene Description	breakpoint cluster region
Omim ID	151410 608232
Gene Ontology	Hyperlink
Gene Summary	A reciprocal translocation between chromosomes 22 and 9 produces the Philadelphia chromosome, which is often found in patients with chronic myelogenous leukemia. The chromosome 22 breakpoint for this translocation is located within the BCR gene. The translocation produces a fusion protein which is encoded by sequence from both BCR and ABL, the gene at the chromosome 9 breakpoint. Although the BCR-ABL fusion protein has been extensively studied, the function of the normal BCR gene product is not clear. The protein has serine/threonine kinase activity and is a GTPase-activating protein for p21rac. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	bcr-abl1 e14a3 chimeric protein

Pathway

- Axon guidance
- Cell cycle
- Chronic myeloid leukemia
- Chronic myeloid leukemia
- ErbB signaling pathway
- Neurotrophin signaling pathway
- Pathogenic Escherichia coli infection - EHEC
- Pathways in cancer
- Pathways in cancer

Disease

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- Adenocarcinoma
- Alzheimer disease
- Alzheimer disease
- Angina Pectoris
- Bipolar Disorder
- Breast cancer
- Breast Neoplasms
- Brief Psychiatric Rating Scale
- Cardiovascular Diseases
- Chromosome Breakage
- Chronic Disease
- Coronary Vasospasm
- Depressive Disorder
- Diabetes Complications
- Esophageal Neoplasms
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- HIV Infections
- Leukemia
- Leukemia
- Lung Neoplasms
- Metabolic Syndrome X
- Neoplasms
- Osteoporosis
- Ovarian cancer
- Ovarian Neoplasms

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- Pulmonary Disease
- Small Cell Lung Carcinoma
- Tobacco Use Disorder
- Urinary Bladder Neoplasms
- Werner syndrome

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