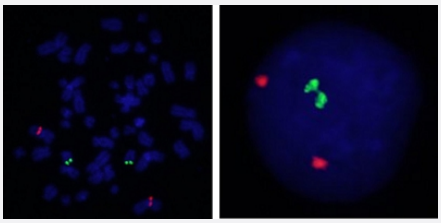
IGH/FOXP1 DY Translocation FISH Probe

Catalog # FT0015 Size 200 uL, 100 uL

Applications



Hybridization position of the probes on the chromosome:

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Specification

Product Description	Labeled FISH probes for identification of gene transloaction using Fluorescent In Situ Hybridization T echnique. (Technology).
Probe 1	**Name:** IGH **Size:** Approximately 1,550kb **Fluorophore:** FITC **Location:** 14q23
Probe 2	**Name:** FOXP1 **Size:** Approximately 1,180kb **Fluorophore:** Texas Red **Location:** 3p14.1
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

Gene Info — IGH

Entrez GeneID	3492
Gene Name	IGH
Gene Alias	IGH, IGH.1@, IGHDY1, MGC72071, MGC88774
Gene Description	immunoglobulin heavy locus
Gene Ontology	Hyperlink

Gene Summary	Immunoglobulins recognize foreign antigens and initiate immune responses such as phagocytosis and the complement system. Each immunoglobulin molecule consists of two identical heavy chains and two identical light chains. This region represents the germline organization of the heavy chain locus. The locus includes V (variable), D (diversity), J (joining), and C (constant) segments. During B cell development, a recombination event at the DNA level joins a single D segment with a J segment; this partially rearranged D-J gene is then joined to a V segment. The rearranged V-D-J is then transcribed with the IGHM constant region; this transcript encodes a mu heavy chain. Later in development B cells generate V-D-J-Cmu-Cdelta pre-messenger RNA, which is alternatively spliced to encode either a mu or a delta heavy chain. Mature B cells in the lymph nodes undergo switch recombination, so that the V-D-J gene is brought in proximity to one of the IGHG, IGHA, or IGHE genes and each cell expresses either the gamma, alpha, or epsilon heavy chain. Recombination of many different V segments with several J segments provides a wide range of antigen recognition. Additional diversity is attained by junctional diversity, resulting from the random addition of nucleotides by terminal deoxynucleotidyltransferase, and by somatic hypermutation, which occurs during B cell maturation in the spleen and lymph nodes. Several V, D, J, and C segments are known to be incapable of encoding a protein and are considered pseudogenes. [provided by RefSeq
Other Designations	-

Gene Info — FOXP1

Entrez GeneID	27086
Gene Name	FOXP1
Gene Alias	12CC4, FLJ23741, HSPC215, MGC12942, MGC88572, MGC99551, QRF1, hFKH1B
Gene Description	forkhead box P1
Omim ID	605515
Gene Ontology	Hyperlink
Gene Summary	This gene belongs to subfamily P of the forkhead box (FOX) transcription factor family. Forkhead box transcription factors play important roles in the regulation of tissue- and cell type-specific gene transcription during both development and adulthood. Forkhead box P1 protein contains both DNA-binding- and protein-protein binding-domains. This gene may act as a tumor suppressor as it is lost in several tumor types and maps to a chromosomal region (3p14.1) reported to contain a tumor suppressor gene(s). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq
Other Designations	fork head-related protein like B|glutamine-rich factor 1

Disease

- Apraxias

- Cardiovascular Diseases
- Chromosome Aberrations
- Developmental Disabilities
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Tobacco Use Disorder
- Vitiligo