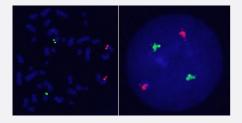


# IGH/BCL10 Translocation FISH Probe

Catalog # FT0035 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 translocation using Fluorescent In Situ Hybridization T echnique. (Technology).
Probe 1	Name: IGH
	Size: Approximately 1550kb
	Fluorophore: FITC
	Location: 14q32
Probe 2	Name: BCL10
	Size: Approximately 610kb
	Fluorophore: Texas Red
	Location: 1p22
Origin	Human



## **Product Information**

Source	Genomic DNA
Reactivity	Human
Notice	We <b>strongly recommend</b> 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 I 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.

# Applications

• Fluorescent In Situ Hybridization (Cell)

Protocol Download

Gene Info — IGH	
Entrez GeneID	<u>3492</u>
Gene Name	IGH
Gene Alias	IGH, IGH.1@, IGHDY1, MGC72071, MGC88774
Gene Description	immunoglobulin heavy locus
Gene Ontology	<u>Hyperlink</u>



### **Product Information**

#### **Gene Summary**

Immunoglobulins recognize foreign antigens and initiate immune responses such as phagocytosi s and the complement system. Each immunoglobulin molecule consists of two identical heavy cha ins and two identical light chains. This region represents the germline organization of the heavy ch ain locus. The locus includes V (variable), D (diversity), J (joining), and C (constant) segments. Du ring 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 i s 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 s pliced to encode either a mu or a delta heavy chain. Mature B cells in the lymph nodes undergo s witch recombination, so that the V-D-J gene is brought in proximity to one of the IGHG, IGHA, or I GHE genes and each cell expresses either the gamma, alpha, or epsilon heavy chain. Recombin ation of many different V segments with several J segments provides a wide range of antigen rec ognition. Additional diversity is attained by junctional diversity, resulting from the random addition al of nucleotides by terminal deoxynucleotidyltransferase, and by somatic hypermutation, which oc curs 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 Ref Seq

### **Other Designations**

Gene Info — BCL10		
Entrez GenelD	<u>8915</u>	
Gene Name	BCL10	
Gene Alias	CARMEN, CIPER, CLAP, c-E10, mE10	
Gene Description	B-cell CLL/lymphoma 10	
Omim ID	603517	
Gene Ontology	<u>Hyperlink</u>	
Other Designations	CARD containing molecule enhancing NF-kB CARD-containing apoptotic signaling protein CAR D-containing proapoptotic protein CARD-like apoptotic protein OTTHUMP00000011647 OTTHU MP00000036080 caspase-recruiting domain-containing protein	

## **Pathway**

- B cell receptor signaling pathway
- T cell receptor signaling pathway

### Disease



- Chromosome Aberrations
- Genetic Predisposition to Disease
- Hematologic Diseases
- Hodgkin Disease
- Lymphoma
- Lymphoproliferative Disorders
- Neoplasm Metastasis
- Neoplasms
- Occupational Diseases
- Testicular Neoplasms
- Waldenstrom Macroglobulinemia
- Werner syndrome