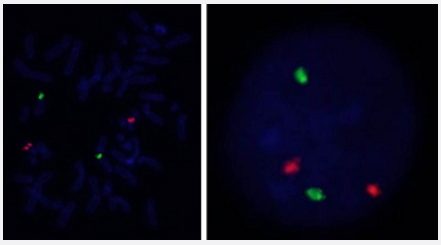
IGH/MALT1 DY Translocation FISH Probe

Catalog # FT0021 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:** MALT1 **Size:** Approximately 970kb **Fluorophore:** TexRed **Location:** 18q21
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 — MALT1

Entrez GeneID	10892
Gene Name	MALT1
Gene Alias	DKFZp434L132, MLT, MLT1
Gene Description	mucosa associated lymphoid tissue lymphoma translocation gene 1
Omim ID	604860
Gene Ontology	Hyperlink
Gene Summary	This gene has been found to be recurrently rearranged in chromosomal translocation with two other genes - baculoviral IAP repeat-containing protein 3 (also known as apoptosis inhibitor 2) and immunoglobulin heavy chain locus - in mucosa-associated lymphoid tissue lymphomas. The protein encoded by this gene may play a role in NF-kappaB activation. Two alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq
Other Designations	MALT associated translocation|MALT-lymphoma associated translocation|caspase-like protein|mucosa associated lymphoid tissue lymphoma translocation protein 1|paracaspase

Pathway

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

Disease

- Chromosome Aberrations
- Gastritis
- Genetic Predisposition to Disease
- Helicobacter Infections
- Lymphoma
- Stomach Neoplasms