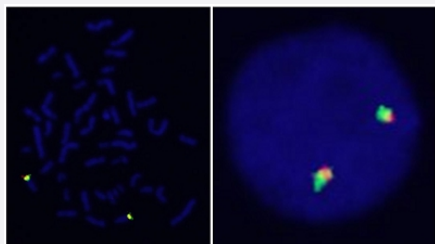


IGH Split FISH Probe

Catalog # FS0069 Size 200 uL, 100 uL

Applications



Specification

Product Description Labeled FISH probes for identification of gene split using Fluorescent In Situ Hybridization Technique. ([Technology](#)).

Probe 1
Name: IGH
Size: Approximately 220kb
Fluorophore: Texas Red
Location: 14q32

Probe 2
Name: IGH
Size: Approximately 900kb
Fluorophore: FITC
Location: 14q32

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 left 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

Probe Position

Storage Instruction

Store at 4°C in the dark.

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 theIGHM 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 theIGHG, IGHA, orIGHE 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

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Disease

- [Chromosome Aberrations](#)