

# IGH@ FISH Probe

Catalog # FA0341      Size 200 uL

## Specification

<b>Product Description</b>	Made to order FISH probes for identification of gene amplification using Fluorescent In Situ Hybridization Technique. ( <a href="#">Technology</a> ).
<b>Origin</b>	Human
<b>Source</b>	Genomic DNA
<b>Reactivity</b>	Human
<b>Notice</b>	We <b>strongly recommend</b> the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: <a href="#">KA2375</a> or <a href="#">KA2691</a> ) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
<b>Regulation Status</b>	For research use only (RUO)
<b>Supplied Product</b>	DAPI Counterstain (1500 ng/mL ) 250 uL
<b>Storage Instruction</b>	Store at 4°C in the dark.

## Applications

- Fluorescent In Situ Hybridization (Cell)

[Protocol Download](#)

## Gene Info — IGH

<b>Entrez GeneID</b>	<a href="#">3492</a>
<b>Gene Name</b>	IGH
<b>Gene Alias</b>	IGH, IGH.1@, IGHDY1, MGC72071, MGC88774
<b>Gene Description</b>	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](#)