

## **Product datasheet for MR207808L3V**

## OriGene Technologies, Inc.

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## Igh (BC049143) Mouse Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Igh (BC049143) Mouse Tagged ORF Clone Lentiviral Particle

Symbol: Igh

Synonyms: Al893585

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

 Tag:
 Myc-DDK

 ACCN:
 BC049143

 ORF Size:
 1461 bp

**ORF Nucleotide** 

OTI Disclaimer:

Sequence:

The ORF insert of this clone is exactly the same as(MR207808).

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through

naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeq:** <u>BC049143</u>, <u>AAH49143</u>

 RefSeq Size:
 1589 bp

 RefSeq ORF:
 1463 bp

 Locus ID:
 111507

Cytogenetics: 12 F1-F2 | 12







## **Gene Summary:**

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-I 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 additional of nucleotides by terminal deoxynucleotidyltransferase, and by somatic hypermutation, which occurs during B cell maturation in the spleen and lymph nodes. The RefSeq represents the IGH locus from C57BL/6. Several V and D segments in C57BL/6 are known to be incapable of encoding a protein and are considered pseudogenes. [provided by RefSeq, Jul 2008]