

## Product datasheet for MC200264

### Ighg1 (BC008237) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Ighg1 (BC008237) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Ighg1
Synonyms:	IgG1, VH7183
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>BC008237 ACACCTCACCATGAACATTGGGCTCAGAATGATTTCTTGTCTTACGTTAAAAGGTGTCCAGTGTGAA GTGCAACTGGTGGAGTCTGGGGAGGCTTAGTGAAGCAGGAGGGTCCCTGAAACTCTCTGTGCAGCTT CTGGATTCACTTCAGTAACATGACATGCTTGGGTCGCCAGACTCCGGAGAAAGAGGCTGGAGTGGG CGCAGCCATTAAATAGTGGTGGTAATATCTCTGTCCAGACAGTGTGAAGGTCGATTCAACCCTC GACAATGCCAAGAACACCTGTACCTCCAATGAGCAGTCTGAAGTCTGAGGACACAGCCATAATT GTCAAGACGGGTAGGTTACGACGGGAGTACTACTTTGACTACTGGGGCCAAGGCACCACTATCACAGT CTCCTCGGCCAAAAGCACCCCCATCTGTCTATCCACTGGCCCTGGATCTGCTGCCAAACTAACTCC ATGGTGACCTGGGATGCCTGGTCAAGGGCTATTCCCTGAGCCAGTGACAGTGACCTGGAACTCTGGAT CCCTGTCCAGCGGTGTGCACACCTCCAGCTGTCTGAGCTGACCTCTACACTCTGAGCAGCTCAGT GACTGTCCCCTCCAGCACCTGGCCAGCCAGACCGTCACCTGCAACGTTGCCACCCGGCAGCAGCACC AAGGTGGACAAGAAAATTGTGCCAGGGATTGTGGTTGAAGCCTTGATATGTACAGTCCCAGAAGTAT CATCTGTCTTCATCTTCCCCCAAAGCCCAAGGGATGTGCTCACCATTACTCTGACTCCTAAGGTCACTG TGTGTTGGTAGACATCAGCAAGGATGATCCGAGGTCCAGTTCAGCTGGTTTAGATGATGTGGAGGTG CACACAGCTCAGACAAAACCCGGAGGAGCAGTTCAACGCACTTCCGTTAGTCAGTGAACCTCCA TCATGCAACCAGGACTGGCTCAATGGCAAGGAGTTCAAATGCAGGGTCAACAGTGAGCTTCCCTGCC CATCGAGAAAACCATCTCCAAAACCAAGGGAGCCAGACCGAAGGCTCCAGGTGTACACCATTCCACCTCCC AAGGAGCAGATGGCAAGGATAAGTCAGTGTGACCTGCATGATAACAGACTTCTCCCTGAAGACATTA CTGTGGAGTGGCAGTGGATGGCAGCCAGGGAGAACTACAAGAACACTCAGCCATCATGGACACAGA TGGCTCTTACTTCGTCTACAGCAAGCTCAATGTGCAAGAGAGCAACTGGGAGGCAGGAAATACTTCACC TGCTCTGTGTTACATGAGGGCCTGCACAACCACCATACTGAGAAGAGCCTCTCCACTCTCCTGGTAAAT GATCCCAGTGTCCCTGGAGCCCTCTGGTCTACAGGACTCTGACACCTACCTCCACCCCTCCGTGTA ATAAAGCACCCAGCACTGCCTGGACCTGCAAAAAAAAAAAAAAA
Restriction Sites:	RsrII-NotI
ACCN:	BC008237



Insert Size:	1392 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
RefSeq:	<u><a href="#">BC008237</a></u>
RefSeq Size:	1523 bp
RefSeq ORF:	1392 bp
Locus ID:	111507
Cytogenetics:	12 F1-F2 12
Gene Summary:	<p>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. 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]</p>