

Product datasheet for **MR202838**

Igk (BC028540) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Igk (BC028540) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Igk
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR202838 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTCTCACTAGCTCCTCTCCTCAGCCTTCTTCTCCTCTGTGTCTCTGATTCTAGGGCAGAAACA
TGACCCAGTCTCCAGCATCCCTGTCCGTGGCTACAGGAGAAAAAGTCACTATCAGATGCATAACCAGCAC
TGATATTGATGATGATATGAAGTGGTACCAGCAGAAGCCAGGGGAACCTCCTAAGCTCCTATTTTCAGAA
GGCAATACTCTTCGTCTGGAGTCCCATCCCGATTCTCCAGCAGTGGCTATGGCACAGATTTTGT
CAATTGAAAAACAGCTCTCAGAAGATGTTGCAGATTACTACTGTTTCAAAGTGATAACATGCCTCTCAC
GTTCCGGTCTGGGACCAAGCTGGAGCTGAAACGGGCTGATGCTGCACCAACTGTATCCATCTTCCCACCA
TCCAGTGAGCAGTTAACATCTGGAGGTGCCTCAGTCGTGTGCTTCTTGAACAACCTTACCCCAAAGACA
TCAATGTCAAGTGAAGATTGATGGCAGTGAACGACAAAAATGGCGTCTGAAACAGTTGGACTGATCAGGA
CAGCAAAGACAGCACCTACAGCATGAGCAGCACCTCACGTTGACCAAGGACGAGTATGAACGACATAAC
AGCTATACCTGTGAGGCCACTACAAGACATCAACTTCACCCATTGTCAAGAGCTTCAACAGGAATGAGT
GT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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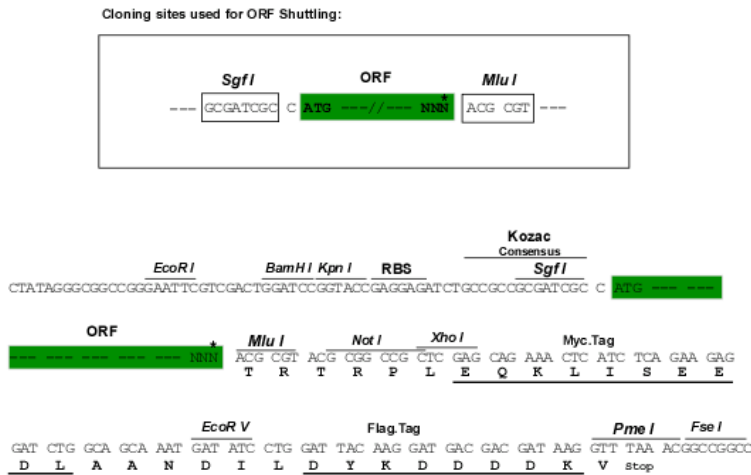
Protein Sequence: >MR202838 protein sequence
Red=Cloning site Green=Tags(s)

MLSLAPLLSLLLLCVSDSRAETTVTQSPASLSVATGEKVTIRCITSTDIDDDMNWYQQKPGPEPKLLISE
 GNTLRPGVPSRFSSSGYGTDVFVTIENTLSEVDADYYCLQSDNMPLTFGAGTKLELKRADAAPTVSIFPP
 SSEQLTSGGASVVCFLNNFYPKDINVKWKIDGSERQNGVLNSWTDQDSKDYMSSTLTLTKDEYERHN
 SYTCEATHKTSTSPIVKSFNNEC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: BC028540

ORF Size: 702 bp

OTI Disclaimer: 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.

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:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
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.

RefSeq: [BC028540](#)

RefSeq Size: 943 bp

RefSeq ORF: 704 bp

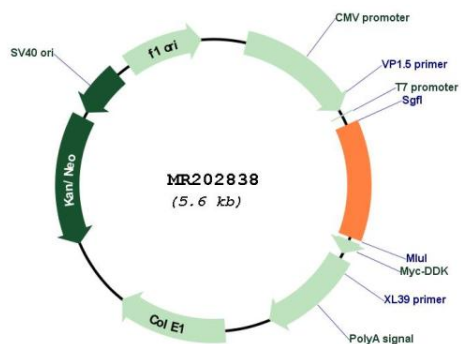
Locus ID: 243469

Cytogenetics: 6 30.89 cM

MW: 25.7 kDa

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. There are two classes of light chains, kappa and lambda. This region represents the germline organization of the kappa light chain locus from the C57BL/6J inbred mouse strain. The locus includes V (variable), J (joining), and C (constant) segments. During B cell development, a recombination event at the DNA level joins a single V segment with a J segment; the C segment is later joined by splicing at the RNA level. 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. Several V segments in this cluster are incapable of encoding a protein and are considered pseudogenes. [provided by RefSeq, Jul 2008]

Product images:



Circular map for MR202838