

Product datasheet for **MG219212**

Cd163 (NM_053094) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cd163 (NM_053094) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cd163
Synonyms:	CD163v2; CD163v3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG219212 representing NM_053094 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGTGGACACAGAATGGTTCTTCTGGAGGTGCTGGATCTCCTGGTTGTAAAAGGTTTGTCCATCTAG
GTTTCTTTGTTGTGGCTGTGAGCTCACTTCTCAGTGCCTCTGCTGTCACTAACGCTCCTGGAGAAATGAA
GAAGGAAGTGAAGTGGCGGGTGGTAAAACAAGTGTAGTGGGAGAGTGGAACTTAAGATCCATGACAAG
TGGGGCACAGTGTGCAGTAACGGCTGGAGCATGAATGAAGTGTCCGTGGTTTCCAGCAGCTGGGATGCC
CAACTTCTATTAAGCCCTTGGATGGGCTAACTCCAGCGCCGGCTCTGGATATATCTGGATGGACAAAGT
TTCTTGTACAGGGAATGAGTCACTCTTTGGGACTGCAAACATGATGGGTGGGAAAGCATAAAGTGTACC
CATGAAAAAGATGCTGGAGTGACCTGCTCAGATGGATCTAATTTGGAGATGAGACTGGTGAACAGTGCAG
GCCACCGATGCTTAGGAAGAGTAGAAAATAAGTTCCAGGGAAAGTGGGGGACGGTGTGTGACGACAAGT
CAGCAAAGATCACGCTTCTGTGATTTGTAACAGCTTGGATGTGGAAGTGCCATTAGTTTCTCTGGCTCA
GCTAAATTGGGAGCTGGTTCTGGACCAATCTGGCTCGATGACCTGGCATGCAATGGAAATGAGTCAAGT
TCTGGGACTGCAAACACCGGGGATGGGGCAAGCATAAAGTGTGACCATGCTGAGGATGTCCGTGTGATTTG
CTTAGAGGGAGCAGATCTGAGCCTGAGACTAGTGGATGGAGTGTCCAGATGTTTCCAGGAAGATTGGAAGT
AGATTTCAAGGAGAAATGGGGACCGTGTGTGATGATAACTGGGATCTCCGGGATGCTTCTGTGGTGTGCA
AGCAACTGGGATGTCCAAGTCCATCAGTGCATTGGTTCGAGTTAATGCCAGTGAAGGATCTGGACAGAT
TTGGCTTGACAACATTTTCATGCGAAGGACATGAGGCAACTCTTTGGGAGTGTAAACACCAAGAGTGGGGA
AAGCATTACTGTCATCATAGAGAAGACGCTGGCGTGACATGTTCTGATGGAGCAGATCTGGAAGTATAGAC
TTGTAGGTGGAGGCAGTGCCTGTGCTGGCATTGTGGAGGTGGAGATTGAGAAAGTGAAGTGGGAAAGTGTG
TAGCCGAGGCTGGACACTGGCAGATGCGGATGTGGTTTGCAGACAGCTTGGATGTGGATCTGCGCTTCAA
ACCCAGGCTAAGATCTACTCTAAAAGTGGGCAACAAATACGTGGCTCTTCTGGATCTTGAATGGAA
ATGAAACTACTTTTTGGCAATGCAAAAAGTGGCAGTGGGGCGCCTTTCCTGTGATAATTTGGAAGAAGC
CAAAGTACCTGCTCAGCCACAGGGAACCCAGACTGGTTGGAGGAGAAATCCCATGCTCTGGTCTGTG



GAAGTGAACACGGAGACGTGTGGGGCTCCGTCTGTGATTTTGACTTGTCTCTGGAAGCTGCCAGTGTGG
 TGTGCAGGGAATTACAATGTGGAACAGTCGTCTATCCTAGGGGGAGCACATTTTGAGAAGGAAGTGG
 ACAGATCTGGGGTGAAGAATCCAGTGTAGTGGGGATGAGTCCCATCTTTCACTATGCTCAGTGGCGCCC
 CCGCTAGACAGAACTTGTACCCACAGCAGGGATGTCAGCGTAGTCTGCTCACGATACATAGATATTCGTC
 TGGCAGGCGGCGAGTCTCCTGTGAGGGAAGAGTGGAGCTCAAGACACTCGGAGCCTGGGGTCCCCTCTG
 CAGTTCTCATTGGGACATGGAAGATGCTCATGTCTTATGTCAGCAGCTGAAGTGTGGGGTGGCCAACT
 ATTCCAGAAGGAGCACATTTTGGGAAAGGAGCTGGTCAGGTCTGGAGTCACATGTTCCAGCTGCATGGAA
 CTCGAGAACATATAGGAGATTGCCTCATGACTGCTCTGGGTGCGCCGACGTGTTCCGAAGGACAGGTGGC
 CTCTGTCTCTGCTCAGGAAACCAATCCCAGACACTATTGCCATGTAGTTCATTGTCTCCAGTCCAAACA
 ACAAGCTCTACAATCCAAAGGAGAGTGAAGTTCCTGCATAGCAAGTGGCCAGCTTCGCTTGGTAGGTG
 GAGGTGGTCGCTGCGCTGGAAGAGTGGAGGTCTACCACGAGGGCTCTTGGGGCACCGTCTGTGATGACAA
 TTGGGATATGACTGATGCCAATGTGGTGTGCAAGCAGCTGGACTGTGGCGTGGCAATTAACGCCACTGGC
 TCTGCTTACTTCGGGGAAGGAGCAGGAGCTATCTGGCTAGACGAAGTCATCTGCACTGGGAAAGAGTCTC
 ATATTTGGCAGTGCCATTACATGGCTGGGGACGCCATAACTGCAGGCACAAAGAAGATGCAGGTGTTAT
 CTGCTCCGAGTTCATGTCTCTGAGGCTGACCAACGAAGCCACAAGAAAAGTGCACAGGTGCCTTGAA
 GTGTTTTACAATGGTACATGGGGCAGTATTGGCAGTAGCAATATGTCTCCAACCACTGTGGGGGTGGTGT
 GCCGTCAGCTGGGCTGTGCAGACAACGGGACTGTGAAACCCATACCTTCAGACAAGACACCATCCAGGCC
 CATGTGGGTAGATCGTGTGCAGTGTCCAAAAGGAGTTGACACTTTGTGGCAGTGCCCTCGTCACCTTGG
 AAACAGAGACAGGCCAGCCCCTCCTCCCAGGAGTCTGGATCATCTGTGACAACAAAATAAGACTCCAGG
 AAGGGCATAACAGACTGTTCTGGAGCTGTGGAGATCTGGCACAAGGTTCTGGGGAACAGTGTGTGATGA
 CTCCTGGGATCTTAATGATGCTAAGGTTGTATGTAAGCAGTTGGGCTGTGGCCAAGCTGTGAAGGCACTA
 AAAGAAGCAGCATTGGTCCAGGAACCTGGGCCATATGGCTCAATGAAATTAAGTGTAGAGGGAATGAGT
 CTTCCCTGTGGGATTGCTCTGCCAAACCTGGGACTCACAGCGACTGTGGGCACAAAGAAGATGCTTCCAT
 CCAGTGCCTCCAAAAATGACTTCAGAATCACATCATGGCAGAGTCAACCCACCTCACGGCAGCTTTG
 GTTTGTGGAGCCATTCTATTGGTCTCCTCATTGTCTTCTCCTGTGGACTCTGAAGCGACGACAGATTC
 AGCGACTTACAGTTTCTCAAGAGGAGAGGTCTTGATACATCAAGTTCAGTACCAAGAGATGGATTCAAA
 GGCGGATGATCTGGACTTGTGAAATCCTCGGGGTCAATCAGAGGCACACTGAGAAGGAAAATGATAAT
 TTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG219212 representing NM_053094
 Red=Cloning site Green=Tags(s)

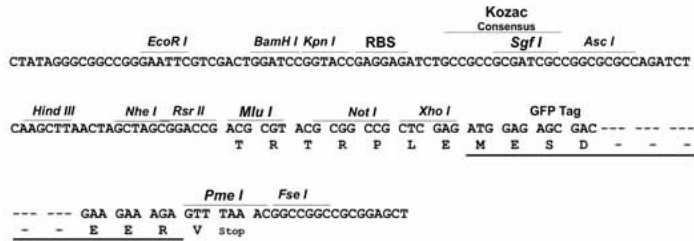
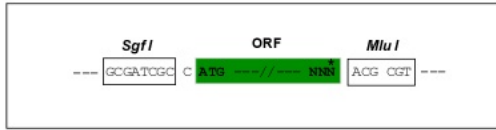
MGGHRMVLLGGAGSPGCKRFVHLGFFVAVVSSLLSASAVTNAPGEMKELRLAGGENNCSGRVELKIHDK
 WGTVCSNGWSMNEVSVCQQLGCPTSICALGWANSSAGSGYIWMKVSCTGNEALWDCKHDGWGKHNC
 HEKDAGVTCSDGSNLEMRLVNSAGHRCLGRVEIKFQGWGTVCDDNF SKDHASVICKQLGCGSAISFSGS
 AKLGAGSGPIWLDLACNGNESALWDCKHRGWGKHNCDAEDVGVICLEGADLSLRLVDGVSRCGRLE
 RFQGEWGTVCDDNWL RDASVVCQQLGCPTAISAIGRVNASEGSGQIWL DNI SCEGHEATLWECKHQEW
 KHYCHHREDAGVTCSDGADLELRLVGGGSRGAGIVEVEIQKLTGKMCSRGWTLADADVVCRLGCGSALQ
 TQAKIYSKTGATNTWLFPGSCNGNETTFWQCKNWQWGLSCDNFEEAKVTCSGHREPRLVGGEIPCSGRV
 EVKHGDVWGSVCDFDLSLEAASVVCRELQCGTVVSI LGGAHFGE GSGQIWGE EFQCSGDESHLSLCSVAP
 PLDRTCTHSRDVSVVCSRYIDIRLAGGESSCEGRVELKTLGAWGPLCSSHWMEDAHVLCQQLKCGVAQS
 IPEGAHFQKAGQVWSMFHCTGTEEHIGDCLMTALGAPTCSEGVASVICSGNQSQTLPCSSSPVQT
 TSSTIPKESEVPCIASGQLRLVGGGRCAGRVEVYHEGSGWTVCDNWDMDANVVCQQLDCGVAINATG
 SAYFGEAGAIWLDEVICTGKESHVQCHSHGWGRHNRHKEDAGVICSEFMSLRLTNEAHKENCRTGRLE
 VFYNGTWGSI GSSNMSP TTVGVVCRQLGCADNGTVKPIPSDKTPSRPMWVDRVQC PKGVDTLWQCPSSPW
 KQRQASPSQESWII CDNKIRLQEGHTDCSGRVEIWHKGSWGTVCDDSWDLNDAKVVCQQLGCGQAVKAL
 KEAAFGPGTGIWLN EIKCRGNESSLWDCPAKPWSHSDCGHKEDASIQC LPKMTSESHHGTGHPTLTALL
 VCGAILLVLLIVFLLWTLKRRQIQRLTVSSRGEVLIHQVYQEMDSKADDL LKSSGVIQRHTEKENDN
 L

TRTRPLE - GFP Tag - V

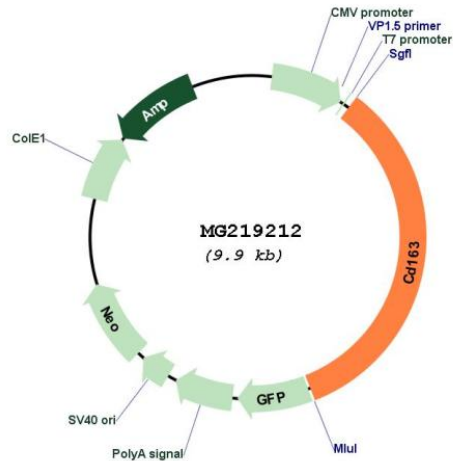
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_053094

ORF Size: 3363 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: [NM_053094.2](#), [NP_444324.2](#)

RefSeq Size: 4409 bp

RefSeq ORF: 3366 bp

Locus ID: 93671

UniProt ID: [Q2VLH6](#)

Cytogenetics: 6 F2

Gene Summary:

Involved in clearance and endocytosis of hemoglobin/haptoglobin complexes by macrophages and may thereby protect tissues from free hemoglobin-mediated oxidative damage. May play a role in the uptake and recycling of iron, via endocytosis of hemoglobin/haptoglobin and subsequent breakdown of heme. Binds hemoglobin/haptoglobin complexes in a calcium-dependent and pH-dependent manner. Induces a cascade of intracellular signals that involves tyrosine kinase-dependent calcium mobilization, inositol triphosphate production and secretion of IL6 and CSF1 (By similarity). [UniProtKB/Swiss-Prot Function]