

Product datasheet for **MG226618**

Cd44 (NM_001177787) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cd44 (NM_001177787) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cd44
Synonyms:	AU023126; AW121933; AW146109; HERMES; Ly-24; Pgp-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226618 representing NM_001177787
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACAAGTTTTGGTGGCACACAGCTTGGGGACTTTGCCTCTTGCAAGTTGAGCCTGGCACATCCACATC
 AGCAGATCGATTTGAATGTAACCTGCCGCTACGCAGGTGATTCCATGTGGAGAAAAATGGCCGCTACAG
 TATCTCCCGACTGAGGCAGCTGACCTCTGCCAGGCTTCAACAGTACCTTACCCACCATGGACCAATG
 AAGTTGGCCCTGAGCAAGGGTTTTGAAACATGCAGGTATGGGTTCATAGAAGGAAATGTGGTAATCCGA
 GGATTCATCCCAACGCTATCTGTGCAGCCAACACACAGGAGTATATCCTCGTCACGTCCAACACCTC
 CCACTATGACACATATTGCTTCAATGCCTCAGCCCCTCCTGAAGAAGACTGTACATCAGTCACAGACCTA
 CCCAATTCCTTCGATGGACCGGTTACCATAACTATTGTCAACCGTATGGTACTCGCTACAGCAAGAAGG
 GCGAGTATAGAACACACCAAGAAGACATCGATGCTTCAAACATTATAGATGACGATGTCAGCAGCGGCTC
 CACCATCGAGAAGAGCACCCAGAAAGTACATTTTGCACACCTACCTTCTACTGAACAGCCTACTGGA
 GATCAGGATGACTCCTTCTTATCCGGAGCACCTTGGCCACCACACAGAGTCATTCTCAGAACTTCTCTA
 CATTACATGGAGAGCCGGAAGAAGACGAAAACCATCCAACAACCTTCTATTCTGCCATCTAGCACTAAGAG
 CGGCGCTAAAGATGCAAGAAGAGGTGGAAGTCTTCCCACAGATACAACCTTCTGTAGAAGGCTACACC
 TTTCAATACCCAGACACAATGGAATAATGGGACTCTTCCCAGTGACCCCTGCTAAAACCTGAGGTCTTTG
 GAGAACTGAAGTGACTCTTGCTACTGACTCCAACGTTAATGTTGATGGCTCCTTACCAGGAGATCGAGA
 CTCATCCAAGGACTCCAGGGGAGTTCGCCACTGTGACTCATGGATCCGAATTAGCTGGACACTCAAGT
 GCGAACCAGGACAGTGGAGTGACCACAACCTTCTGGTCTATGAGGAGACCTCAGATTCAGAATGGCTCA
 TCATCTTGGCATCTCCTGGCACTGGCTGATTCTTGGCGTCTGCATCGCGGTCATAGTAGGAGAAG
 GTGTGGGCAGAAGAAAAAGCTGGTGATCAACGGTGGCAATGGGACGGTGAAGACAGGAAACCCAGTGAG
 CTCAACGGGGAGGCCAGCAAGTCTCAGGAAATGGTGCATTTGGTGAACAAGGAACCATCAGAGACCCCGG
 ACCAGTGTATGACAGCTGACGAGACCCGGAATCTGCAGAGTGTGGACATGAAGATTGGGGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG226618 representing NM_001177787
 Red=Cloning site Green=Tags(s)

MDKFWHWTAWGLCLLQLSLAHPHQIDLNVTCRYAGVFHVEKNGRYSISRTEADLCQAFNSTLPTMDQM
 KLALSKGFETCRYGFIENNVIPRIHPNAICAAHNTGVYILVTSNTSHYDTCFNASAPPEEDCTSVTDL
 PNSFDGPVTITIVNRDGRYSKKGGEYRTHQEDIDASNIIDDDVSSGSTIEKSTPESYILHTYLPTEQPTG
 DQDSSFIRSTLATTQSHSQNFSTLHGEPEDENHPTTSILPSSTKSGAKDARRGSLPTDTTTTVEGYT
 FQYPTDMENGLFPVTPAKTEVFGETEVLATDSNVNVDGSLPGDRDSSKDSRGSRTVTHGSELAGHSS
 ANQDSGVTTTTSGPMRRPQIPEWLIILASLLALILAVCIAVNSRRRCGQKKKLIVINGNGTVEDRKPSE
 LNGEASKSQEMVHLVNKEPSETPDQCMTAETRNLQSVDMKIGV

TRTRPLE - GFP Tag - V

Restriction Sites:

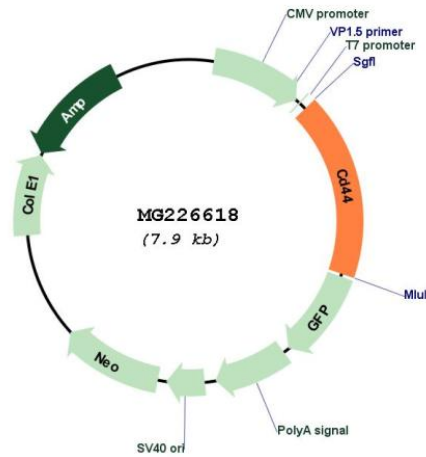
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001177787

ORF Size: 1392 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001177787.1](#), [NP_001171258.1](#)

RefSeq Size: 4706 bp

RefSeq ORF: 1395 bp

Locus ID: 12505

UniProt ID: [P15379](#)

Cytogenetics: 2 54.13 cM

Gene Summary:

Cell-surface receptor that plays a role in cell-cell interactions, cell adhesion and migration, helping them to sense and respond to changes in the tissue microenvironment. Participates thereby in a wide variety of cellular functions including the activation, recirculation and homing of T-lymphocytes, hematopoiesis, inflammation and response to bacterial infection. Engages, through its ectodomain, extracellular matrix components such as hyaluronan/HA, collagen, growth factors, cytokines or proteases and serves as a platform for signal transduction by assembling, via its cytoplasmic domain, protein complexes containing receptor kinases and membrane proteases (PubMed:8343954, PubMed:25065622). Such effectors include PKN2, the RhoGTPases RAC1 and RHOA, Rho-kinases and phospholipase C that coordinate signaling pathways promoting calcium mobilization and actin-mediated cytoskeleton reorganization essential for cell migration and adhesion (By similarity). [UniProtKB/Swiss-Prot Function]