

Product datasheet for **MG222873**

Cd244 (NM_018729) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cd244 (NM_018729) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cd244
Synonyms:	2B4; C9.1; F730046O15Rik; Ly90; NAIL; NKR2B4; Nmrk; SLAMF4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG222873 representing NM_018729 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTGGGGCAAGCTGTCTTCAACAACCTTTCTGCTCCTCAGGGCTCATCAGGGCCAAGACTGCCAG
ATTCTTCTGAAGAAGTGGTTGGTGTCTCAGGAAAGCCTGTCCAGCTGAGGCCTTCCAACATACAGACAAA
AGATGTTTCTGTTCAATGGAAGAAGACAGAACAGGGCTCACACAGAAAAATTGAGATCCTGAATTGGTAT
AATGATGGTCCCAGTTGGTCAAATGTATCTTTTAGTGATATCTATGGTTTTGATTATGGGGATTTGCTC
TTAGTATCAAGTCAGCTAAGCTGCAAGACAGTGGTCACTACCTGCTGGAGATACCAACACAGGCGGAAA
AGTGTGCAATAAGAACTTCCAGCTTCTTATACTTGATCATGTTGAGACCCTAACCTGAAGGCCAGTGG
AAGCCCTGGACTAATGGGACTTGTCAACTGTTTTTGTCTGCTTGGTGACCAAGGATGACAATGTGAGCT
ACGCTTTGTACAGAGGGAGCACTCTGATCTCCAATCAAAGGAATAGTACCACTGGGAGAACCAGATTGA
CGCCAGCAGCCTGCACACATACACCTGCAACGTTAGCAACAGAGCCAGCTGGGCAAACCACCCCTGAAC
TTCACCCATGGCTGTCAAAGTGTCCCTTCGAATTCAGATTTCTGCCCTTGGGGTGATCATCGTGATTC
TAGTTACATTATTTCTCGGGCCATCATTTGTTTCTGTGTGGACTAAGAAGAGGAAGCAGTTACAGTT
CAGCCCTAAGGAACCTTTGACAATATATGAATATGTCAAGGACTCACGAGCCAGCAGGGATCAACAAGGA
TGCTCTAGGGCCTCTGGATCTCCCTCGGCTGTCCAGGAAGATGGGAGGGGACAAAGAGAATTGGACAGG
GTGTTTCTGAGGTGCTGGAGCAGTTGCCACAGCAGACTTTCCCTGGAGATAGAGGCACCATGTACTCTAT
GATACAGTGCAAGCCTTCTGATTCCACATCACAAGAAAAATGTACAGTATATTAGTAGTCCAGCCTTCC
AGGAAGTCTGGATCCAAGAAGAGGAACCAGAACTTCTCTTAAGTTGTACCGTGTACGAGGAGTTGGAA
ACCCATGGCTCAAAGCTCACAACCCTGCCAGGCTGAGCCGACAGAGCTGGAGAAGCTTTGATGTCTACTC
C

ACGGTACGGGGCCGCTCGAG - GFP Tag - GTTTAA



[View online >](#)

Protein Sequence: >MG222873 representing NM_018729
 Red=Cloning site Green=Tags(s)

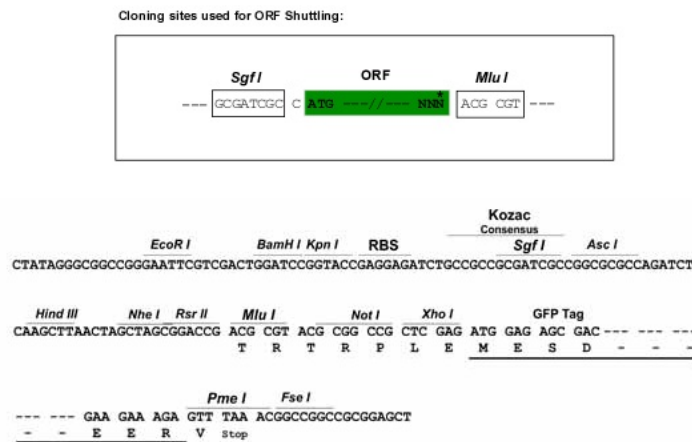
MLGQAVLFTTFLLLRAHQGDQCPDSSEEVVGVSGKPVQLRPSNIQTKDVSQWKKTEQGSHRKIEILNWX
 NDGPSWSNVSFSDIYGFYDYGDFALSIKSAKLQDSGHYLLLEITNTGGKVCNKNFQLLILDHVETPNLKAQW
 KPWTNGTCQLFLSCLVTKDDNVSYALYRGSTLISNQRNSTHWENQIDASSLHTYTCNVSNRASWANHTLN
 FTHGCQSVPSNFRFLPFVGIIVILVTLFLGAIICFCVWTKKRKQLQFSPKEPLTIYEYVKDSRASRDQQG
 CSRASGSPSAVQEDGRGQRELDRRVSEVLEQLPQQTFPGDRGTMYSMIQCKPDSSTSQEKCTVYVSVVQPS
 RKSGSKRNQNSLSCTVYEEVGNPWLKAHNPARLSRRELENFDVYS

TRTRPLE - GFP Tag - V

Chromatograms: https://cdn.origene.com/chromatograms/ja1823_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018729

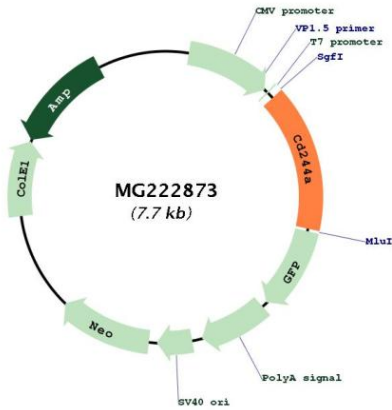
ORF Size: 1191 bp

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:	<ol style="list-style-type: none">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_018729.2 , NP_061199.2
RefSeq Size:	3758 bp
RefSeq ORF:	1194 bp
Locus ID:	18106
UniProt ID:	Q07763
Cytogenetics:	1 79.52 cM
Gene Summary:	<p>Heterophilic receptor of the signaling lymphocytic activation molecule (SLAM) family; its ligand is CD48. SLAM receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. Acts as activating natural killer (NK) cell receptor (PubMed:8326140, PubMed:12734329, PubMed:19648922, PubMed:20962259). Activating function implicates association with SH2D1A and FYN. Downstreaming signaling involves predominantly VAV1, and, to a lesser degree, INPP5D/SHIP1 and CBL. Signal attenuation in the absence of SH2D1A is proposed to be dependent on INPP5D and to a lesser extent PTPN6/SHP-1 and PTPN11/SHP-2. Stimulates NK cell cytotoxicity, production of IFN-gamma and granule exocytosis (PubMed:8326140, PubMed:15169881, PubMed:15998796, PubMed:22683124). Optimal expansion and activation of NK cells seems to be dependent on the engagement of CD244 with CD48 expressed on neighboring NK cells (PubMed:15905190). Regulation of NK cell activity by adapters Sh2d1b and Sh2d1b2 is reported conflictingly (PubMed:16127454, PubMed:16425036). Acts as costimulator in NK activation by enhancing signals by other NK receptors such as NCR3 and NCR1. At early stages of NK cell differentiation may function as an inhibitory receptor possibly ensuring the self-tolerance of developing NK cells (By similarity). Involved in the regulation of CD8(+) T-cell proliferation; expression on activated T-cells and binding to CD488 provides costimulatory-like function for neighboring T-cells (PubMed:11739483). Inhibits inflammatory responses in dendritic cells (DCs) (PubMed:25643613).[UniProtKB/Swiss-Prot Function]</p>

Product images:



Circular map for MG222873