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Product datasheet for MG219092

Dock8 (NM_028785) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dock8 (NM_028785) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Dock8
Synonyms:	1200017A24Rik; 5830472H07Rik; A130095G14Rik; AI461977
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG219092 representing NM_028785 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCCACGCTGCCGAGCGCCGAGCGCCGCGCCTTCGCGCTCAAGATCAACAGGTATTCATCGTCAGAAA TAAGGAAGCAGTTTACGCTCCCACCCAACCTCGGACAGTACCATCGGCACAGTATCAGTACATCTGGTTT CCCCTCTCTTCAGCTACCTCAGCTTTATGAGCCTGTCGAGCCAGTGGACTTTGAAGGACTCGTGATGACA CACTTAAACAGCTTGGATGCAGAGCTGGCCCAGGAGCTGGGGGACCTCACCGATGACGACCTGCATGTGG CCTTCACACCCAAAGAATGTAGGACTTTGCAGCACTCTCTGCCAGAGGAAGGAGTTGAACTGGATCCTCA CGTCAGAGACTGTGTTCAGACCTATATTCGAGAGTGGCTGATTGTAAACCGGAAAAACCAAGGAAGTTCA GAGTTTTGCAGCTTTAAAAAGACGGGATCTCGCAGAGATTTTCAGAAGACGCTTCAGAAACAGACGTTTG AGTCAGAAACCTTGGAGTGCAGTGAACCGGACACTCAGACAGGACCCCGTCATCCCTTAAACGTGCTGTG TGACGTGTCTGGGAAGGGCCCCCTCACTTCTTGTGACTTCGACCTCCGCAGCCTGCAGCCTGATGAGCGG CTGGAAAACCTGCTCCAGCTTGTGAGCGCTGAGGACTTTGAGAAGGAGAAGGAGGAGGCCCGCAAGACCA ATCGGCCGGCTGAGCTCTTTGCCCTCTATCCGCCCGTGGATGAGGAGGATGCTGTGGAAATACGTCCAGT ACCTGAATGTCCTAAGGAACATCTGGGCAACAGAATATTGGTCAAGGTGCTGACTCTGAAGTTTGAGATT GAAATTGAACCTCTGTTTGCCAGTATTGCCCTCTATGACGTTAAAGAAAGGAAAAAGATCTCAGAAAATT TCCACTGTGACCTGAACTCCGACCAGTTCAAAGGGTTTCTGCGAGCTCACACACCCTCGATTGACCCATC GAGTCAGGCTAGGTCTGCCGTGTTCTCTGTCACCTACCCATCTTCAGACATCTACCTGGTTGTCAAGATT GAAAAGGTCCTTCAGCAAGGAGAGATTGCAGACTGTGCAGAACCCTACATGATCATCAAAGAAAGCGATG GTGGAAAGAGTAAAGAAAAGGTTGAAAAACTAAAACTTCAAGCTGAATCCTTCTGCCAACGTTTGGGGAA ATACCGGATGCCCTTCGCCTGGGCCCCCATTAGCTTAGCAAGCTTCTTCAACATCTCCACCCTTGAAAGG GAGAGCACAGATGTGGAGCCTGGGGTTGGGAGGAACTCTGTGGGTGAGAAGAGGAGCTTGTCCCAATCCA GGAGGCCCTCTGAGCGAACCCTCTCCTTGGAGGAAAATGGAGTTGGATCCAACTTCAAAGCCACCACCTT GGCCACCAACATCTTCTTCAAACAGGAGGGAGATCGCCTTAGTGATGAAGACTTGTTCAAGTTTTTAGCT

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AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG219092 representing NM_028785
Red=Cloning site Green=Tags(s)

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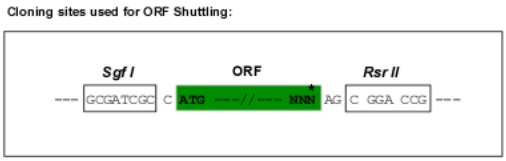
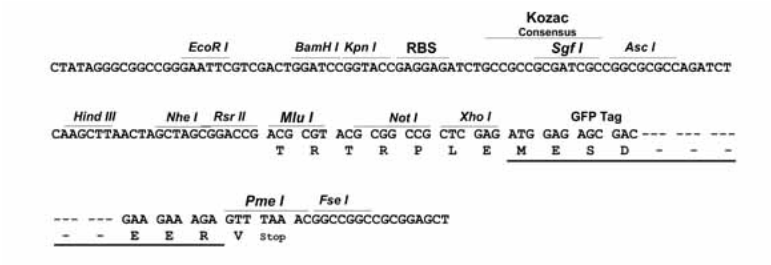
SGPTRTRRLE – GFP Tag – V

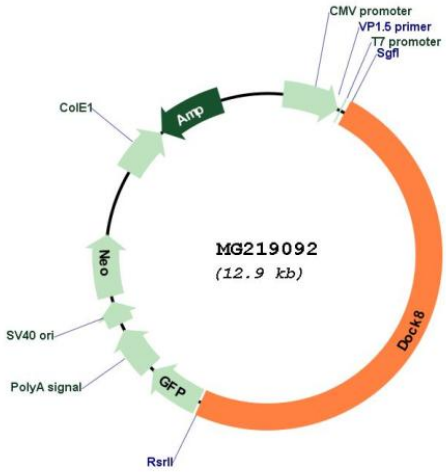
Restriction Sites: SgfI-RsrII

Cloning Scheme:





Plasmid Map:



ACCN:	NM_028785
ORF Size:	6300 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_028785.3, NP_083061.2
RefSeq Size:	7810 bp
RefSeq ORF:	6303 bp
Locus ID:	76088
UniProt ID:	Q8C147
Cytogenetics:	19 B
Gene Summary:	Guanine nucleotide exchange factor (GEF) which specifically activates small GTPase CDC42 by exchanging bound GDP for free GTP (PubMed:28028151, PubMed:22461490). During immune responses, required for interstitial dendritic cell (DC) migration by locally activating CDC42 at the leading edge membrane of DC (PubMed:22461490, PubMed:25713392). Required for CD4(+) T-cell migration in response to chemokine stimulation by promoting CDC42 activation at T cell leading edge membrane (PubMed:28028151). Is involved in NK cell cytotoxicity controlling polarization of microtubule-organizing center (MTOC), and possibly regulating CCDC88B-mediated lytic granule transport to MTOC during cell killing (By similarity). [UniProtKB/Swiss-Prot Function]