

## Product datasheet for **MC225216**

### Dock10 (NM\_175291) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Dock10 (NM\_175291) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Dock10  
**Synonyms:** 9330153B10Rik; A630054M16Rik; Jr4; Jr5; mKIAA0694; R75174; ZIZ3; Zizimin3  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC225216 representing NM\_175291  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCCGGGGAGCGGACCCGCAGGTTACCCGGAGCCTGCTGAGACCGGGACAGGCGGCCGAGCTCCGGC  
 ACAGCGCCCGCTCTGCCCGCGGTGGCCGTGAGCAGCCGTGAGCAGCAGCGGCAGGAAAAGCCAGACT  
 CTTGGATCCTTTGGATTATGAAACCGTCATTGAAGAACTTGAAGAACCTATCGGGATGATCCTCTTCAG  
 GACCTTCTGTTCTCCCAAGTGTGACTTCTCAACAGCCACGGTTTCTTGGGATATCCGAACACTCTATT  
 CGACGGTACCAGAAGAGGCAGAGCACAGGGCAGAAAGTCTGCTGGTAAAAGAGGCTTGTAAATTCTACAG  
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 CTTGAGTTGAAGATGAACGACCTGACCTATTTGTGCTGGCTGCTGAAACAGAGTCAGATATGGAGCAA  
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 CCAAAGCAGGCTGTCTTCTGTGAGTATCCACTCTGAAATTGTTTTGGTGGCCAAAGTCGAAAAAG



TCTTAATGGGAAACATCGGGAGTGGTGCTGAACCTTATATCAAGAATCCAGACTCCAACAAGTTGCACA  
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 TCACGAACAACCTTGCCAATGGAGATAAACAGATGAAAAACAGCAATTTCCAGCAGAGGTGAAAGATCT  
 GACTAAACGTATAAGGACTGTTTTGATGGCCACAGCCAGATGAAGGAGCATGAGAAGGACCCAGAGATG  
 CTGGTGGACCTTCAATACAGCCTAGCAAATCCTATGCAAGTACCCCGGAGTTACGGAGGACCTGGCTGG  
 AAAGCATGGCCAAGATTCATGCAAGAAATGGAGACCTGTCTGAGGCTGCGATGTGTTACATCCATATAGC

TGCACTTATTGCAGAATACCTGAAGCGCAAGGGTACTGGAAAATGGAAAAGATTTGCACACCACCCTG  
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 CTATGGGATGGCCAGCCTTTCTGAGCATCACCCAAACATTAAAGAAGAAGGAGCAATGAAAGAGGATTC  
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 CTTGTTCCCTACGTAAGAAGAGGATCCAGGTCATCAGCCAATCAAGCACAGAGCTGAATCCTATCGAG  
 GTGGCAATTGATGAGATGTCAGGAAGGTCTCTGAGCTTAATCAGCTGTGCACCACAGAGGAGTGGATA  
 TGATCCGCTACAGCTCAAACCTCAGGGCAGTGTGAGCTGAAGGTCAATGCTGGCCAATGGCTTATGC  
 TCGAGCCTTTCTGAAGAACTAATGCAAAGAAGTATCCTGACAACCAAGTTAAGCTACTAAGGAAATA  
 TTCAGGCAATTTGCAGATGCGTGTGGCAGGCTTTGATGTGAATGAGCGTCTCATCAAGGAAGACCAGC  
 TGGAGTACCAGGAAGAACTGAGGTCCCATTATAAGGACATGCTCAGTGAAGTGTCTGCCATCATGAATGA  
 GCAGATTACGGGCAGGGACGACCAGCAAAGTGGCGAGTGGAGCGACCCTACACCACACGTGAAGTACG  
 AAGGGGACCGGGCTGTACCTGTGGTCTCCATCTCATCCAGTGGCGAGGTTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTAA

**Restriction Sites:**

Sgfl-Mlul

**ACCN:**

NM\_175291

**Insert Size:**

6564 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](mailto: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](#)

**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\\_175291.4](#), [NP\\_780500.2](#)

**RefSeq Size:** 7308 bp

**RefSeq ORF:** 6564 bp

**Locus ID:** 210293

**UniProt ID:** [Q8BZN6](#)

**Cytogenetics:** 1 C5

**Gene Summary:** Guanine nucleotide-exchange factor (GEF) that activates CDC42 and RAC1 by exchanging bound GDP for free GTP. Essential for dendritic spine morphogenesis in Purkinje cells and in hippocampal neurons, via a CDC42-mediated pathway (PubMed:25851601). Sustains B-cell lymphopoiesis in secondary lymphoid tissues and regulates FCER2/CD23 expression (PubMed:27502165). [UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1, alternatively referred to as DOCK10.1) encodes the longer isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.