

Product datasheet for MC229716

Dock10 (NM_001285927) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dock10 (NM_001285927) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Dock10
Synonyms:	9330153B10Rik; A630054M16Rik; Jr4; Jr5; mKIAA0694; R75174; ZIZ3; Zizimin3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC229716 representing NM_001285927 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATGAGCTTCCGAGGAAAGGAATTCTGGAAGAGGAGGCGAACAGTGAAGAGAGTGAACCCAGAAGGAA
TCCACAAGGCTGGTGCTCAGGAAAAGCCCAGACTCTTGGATCCTTTGGATTATGAAACCGTCATTGAAGA
ACTTGAAGACCTATCGGGATGATCCTCTTCAGGACCTTCTGTTCTTCCCCAGTGATGACTTCTCAACA
GCCACGGTTTCTGGGATATCCGAACACTCTATTCGACGGTACCAGAAGAGGCAGAGCACAGGGCAGAAA
GTCTGCTGGTGAAGAGGCTTGTAAATTCTACAGTTCCAGTGGTACGTGGTAACTACAAATATGAACA
ATATTCTGGAGATATTCGACAGTTGCCCGAGCAGAACACAAGCCAGAGAACTTCCTTCACATTCTTT
GAGGTTGACCATGAAGATGCTGATAAGGATGAAGATACCACATCCCACTCATCATCAAGGGCGGTGGGG
GAGCTGGAGGTAAGTGTGTTCAAGTCTGGCTGGCTTTACAAGGGGAATTTTAAAGCACTGTGAACAA
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ATGAACTTTTACAAAGATGAAAAGATATCCAAAGAGCCCAAGGGCTGCATCTTTTGGATTCTGCACAG
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CCCGAGGGCCCACTCCAGGGAAGGAAAAGTGCAGAGCTTGTGAGCTGGGGCTAGATCCACTGGATAACT
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ATACCTCACAGAAACCGAAGACACTGTCAAAACACACGAAACATGGGCAGACTCAATCTGTTCTCCCTG
GACCCAGACATAGACACCCTGAAGCTTCAAAAAAGGGACAGTTTTTGAAGTGAAGTGTGATGATCAACCCCT
TTGAAGAGAAAGCTGCCAAAAGATCATGATCATCTGTAGAGCTCTCAACTTCAATCTTCAGGGATGTGT
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AGAGATAACAGGAAGATCTCTGCGGACTTCCACGTGGACCTAAATCACCTGCTGTCCGGCAGATGCTCT
CGGGGACCCACCGCCTTGAAAACGGCAATATTGACACCGGTACACCAAGACAATCGGAAGAACCTCA
CATAAAGGGCCTTCCAGAGGAATGGTTAAATTCCTCAAGCAGGCTGTCTCTGTGAGTGATCCACAC



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TCTGAAATTGTTTTGGTGGCCAAAGTCGAAAAAGTCTTAATGGGAAACATCGGGAGTGGTGCTGAACCTT
 ATATCAAGAATCCAGACTCCAACAAGTTTGACAAAAAGATTCTAAAAATCCAATAGGCAGTTCTGCAGCAA
 ATTGGGGAATATCGGATGCCGTTTGCTTGGGCAGTGAGATCTGTATTTAAGGACAACAGGGGAACGTG
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 AACTGGTGTGAGCTACAGAAGAGCTGACCGGATAAGCAAAATGCAGAGCATCCCTGGAAGCCTGGATAT
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 CTCAAAGATTCCCGAGTCTTACCAAAGCGAACTAGACAACCTGGTGATGGGCCTGTGTGACCACTGAT
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 CAGACTTCTTCAGCATCTTGGACGTTTGTCTTCAGAATTTAGATACCTAGGGAAACGCAATATAATAAG
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 TCCTGCCAGACATCAGGTCTCTTGTGACAATGGATGCACACGACTTCTGGCCACGAGGGACATAAGCAGC
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 GGACAACAGCATGAACAGCAATTCCAATGAAATAGACATTGTCCACCATGTTGACACAGAGGCCAACATA
 GCCACCGAGGTCTGCCTCACTATTCTGGACCTGCTGTCTCTTTTACCAGGTCCACCAGAGACAGCTCC
 AACATCCGACTGTCAAATTCCTCATGAAAAGGGTCTTCGATACTTACATGCTGTTTTTCCAAGTCAA
 CCAGTCAGCCTCAGCCCTGAAACACGTGTTTGTCTTTTAAAGACTGTTTGTGTGCAAGTTTCCGTCAGCA
 TTTTTCCAAGGGCTGCTGACCTCTGTGGCTCATTCTGCTATGAAGTCTCAAATGCTGTAACCACAGGT
 CAAGGTGACTCAGATGGAAGCTTCAGCACTTCTATACTTCTTCATGAGGAAGAAGTTTGTGTTTAAACA
 GCAGAAGTCAATTGTCCGCTCTCACTTACAACATCAAAAGCAGTGAGCCAGTTAATAGCTGATGCAGGG
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 AAAACAGCAATTTCCAGCAGAGGTGAAAGATCTGACTAAACGTATAAGGACTGTTTTGATGGCCACAGC
 CCAGATGAAGGAGCATGAGAAGGACCCAGAGATGCTGGTGGACCTTCAATACAGCCTAGCAAACCTCTAT
 GCAAGTACCCCGAGTTACGGAGGACCTGGCTGGAAGCATGGCCAAGATTATGCAAGAAATGGAGACC

TGCTCTGAGGCTGCGATGTGTTACATCCATATAGCTGCACTTATTGCAGAATACCTGAAGCGCAAGGGTTA
 CTGGAAATGGAAAAGATTTGCACACCCCTGCTTCCAGAAGACACCAACCTGTGATAGCAACTTA
 TTAATAACAACTCCAGGCGGAGGAAGCATGTTCTCTATGGGATGGCCAGCCTTTCTGAGCATCACCCAA
 ACATTAAGAAGAAGGAGCAATGAAAGAGGATTCTGGAATGCAAGACACCCCGTACAATGAGAATCCT
 AGTGGAACAGCTGTATATGTGTGGAGTTCCTTTGGAAGTCTGAACGATACGAACATCGCTGATGTC
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 AACATCAATCGCTTTGTCTTTGAGACACCCTTCACTCTGTCAGGCAAGAAGCACGGAGGAGTGGCTGAGC
 AGTGCAAGCGGAGGACAGTCTGACCACAAGCCACTTGTCCCTACGTAAGAAGAGGATCCAGGTCAT
 CAGCCAATCAAGCACAGAGCTGAATCCTATCGAGGTGGCAATTGATGAGATGTCCAGGAAGGTCTCTGAG
 CTTAATCAGCTGTGCACCACAGAGGAGGTGGATATGATCCGCTACAGCTCAAACCTCCAGGCGAGTGTCA
 GCGTGAAGGTCAATGCTGGGCCAATGGCTTATGCTCGAGCCTTTCTTGAAGAACTAATGCAAAAGAGTA
 TCCTGACAACCAAGTTAAGCTACTAAAGGAAATATTAGGCAATTTGCAGATGCGTGTGGCAGGCTCTT
 GATGTGAATGAGCGTCTCATCAAGGAAGACCAGCTGGAGTACCAGGAAGAACTGAGGTCCCATTATAAGG
 ACATGCTCAGTGAATGTCTGCCATCATGAATGAGCAGATTACGGGCAGGGACGACCCAGCAAAGTGCAG
 AGTGGAGCGACCTACACCACAGTGTAACTAGCAAGGGGACCGCGCTGTACCTGTGGTCTCCATCTCA
 TCCAGTGGGAGGTTGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001285927

Insert Size: 6528 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001285927.1](#), [NP_001272856.1](#)

RefSeq Size: 7324 bp

RefSeq ORF: 6528 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 (2, alternatively referred to as DOCK10.2) contains an alternate first exon and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (2) has a distinct N-terminus and is shorter than 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.