

Product datasheet for **MR215994**

Diaph1 (NM_007858) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Diaph1 (NM_007858) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Diaph1
Synonyms:	D18Wsu154; D18Wsu154e; Di; Dia1; Diap1; Drf; Drf1; mDi; p140m; p140mDia
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR215994 representing NM_007858, codon optimized . Due to the complexity of NM_007858, the ORF clone is codon optimized for mammalian Expression. The nucleotide sequence differs from the reference sequence, yet the amino acid sequence remains identical.

Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGCCATCCGGAGGAGGACTTGGACCCGGTCGGGGAACACGCGACAAGAAGAAAGGTCGGTCCCTG
ACGAGTTCCTGCTACGGGAGGTGACGGTGGTAAGCATAAAAATTCCTCGAGAGTTCACTTCAATGCG
GATTAAGAAAGAAAAGGAAAAGCCAACTCCGCTCACCGAAACAGTTCTGCCAGTTACGGAGACGACCC
ACCGCCAAAGCCTGCAGGATATTTCCGACGAGCAAGTGCTTGTGCTTTTCGAGCAGATGCTGGTTGACA
TGAACCTTAATGAAGAGAAGCAGCAGCCCTGAGAGAGAAAGACATCGTTATTAAGAGAGAAATGGTGAG
TCAGTACCTGCACACCAGCAAAGCTGGGATGAACCAGAAGGAGAGCTCTAGATCCGCTATGATGTACATT
CAAGAAGTGAATCTGGCCTGCGGATATGCATCTCCTGTCTTGTCTGGAGAGCCTGAGAGTGAGCCTGA
ACAACAACCCAGTAAGTTGGGTCCAACATTCGGGGCAGAAGTTGGCTAGCCTGGACATTCTCAA
ACGGCTGCACGACGAAAAGGAGGAAACATCCGGGAATTATGATTCCCGCAACCAGCAGATCATAAGG
TGCTGAAGGCGTTTCATGAACAACAAGTTCCGCATAAAGACCATGCTCGAAACCGAGGAGGCATTCTTT
TGCTGGTCCGCGCATGGATCCAGCCGTCCTAACATGATGATTGATGCTGCGAACTTCTCTGCCCCT
GTGTATCTGCCTCAGCCTGAGGATATGAACGAAAGGGTCTCGAAGCTATGACTGAACGGGCGGAAATG
GACGAGGTCGAGAGGTTCCAGCCCTTCTGGATGGGTTGAAGTCTGGAACCTCTATCGCACTCAAGGTCG
GTTGTCTCCAAGTATCAACGCGCTGATTACCCCGCAGGAGCTGGATTTCCGCGTGCACATAAGATC
AGAGCTGATGAGGCTCGCCTGCATCAGGACTCCAAGAGCTGCGCGAGATCGAAAACGAAGACATGAAG
GTCAGCTCTGTGTTCGATGAACAGGGCGACGAGGACTTTTTTATCTCAAGGACGCTGGACGACA



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TCCGCATGGAATGGATGATTTTGGAGAAGTGTTCCAGATCATCCTGAACACAGTTAAAGATTCTAAAGC
 CGAACCACATTTTTTGGATATTCTGCAGCATCTGCTCCTGGTGAGGAACGACTACGAAGCACGACCCCAA
 TACTATAAGCTCATTGAAGAATGCGTTTTACAGATTGTCTGCATAAAGATGGGACCGATCCGGATTTCA
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 GAGTGAGGCTAAGGCTACCGAAGTGGAGAAGAAGCTTGATAGTGAACACTGCCAGGCACGAGCTGCAG
 TCGAGATGAAGAAGATGAAAAAGACTTTGAACAAAAACTGCAGGACTGCAGGGGAGAAGGATGCC
 TCGACTCAGAAAAGCAACAGATTACCGTCAAGAAACAAGATCTGGAAGCTGAGGTTTCAAGCTTACGGG
 AGAAGTCGAAAAGCTGAGCAAGGAGCTTGAAGATGCCAAGAACGAGATGGCGAGCCTGTCAGCGGTGGTG
 GTCGCTCCTTCCGTGTCTTCTAGCGCAGCCGTGCCCCCTGCCCCCGCTTCCGGGAGATTCTGGGACCG
 TGATACCGCCACCCCAACCCCAACCGCTGCCTGGCGGGTGTGCCCCCTTACCACCCTCCCTCC
 TGGTACATGCATCCACCTCCCTCCCTTCTGGCGGTGCGTGTATTCCCCGCCACCTCAGTTGCC
 GGTAGTGTGCCATCCCCACCTCCGCCACTCCCGGGTGCAGCAAGATTCCCCCTCCGCTCCTCTCC
 CAGGCGCAGCCGAATTCGCTCCTCCTCCCTGCCCGTCAACCGCAATCCACCTCCCCCCCCACT
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 CCGCTGCCCGGAGACCCGGGCTCCTCCTCCGCTCCGCTTCCAGGGGCCAGGCATTCTCCTC
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 GTTTGGCCTCACCCCAAAAAAGTTTAAAGCCTGAGGTGCAGCTCAGAAGGCCAAATTGGTCTAAGTTT
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 TTTTCGTAAGTCAACCTGGCATTCTCAGCACAGACCAAGACTTCTAAAGCAAAAAAGGATCAGGAGGG
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 CAGAACCTCTCTATCTTCCGCGTATTCCGCATGCCTTACCAGGAGATCAAAAATGTCATTCTTGAGG
 TGAATGAGGCAGTGTGACGGAGAGCATGATCCAAAATCTTATCAAGCAGATGCCCGAGCCGGAGCAGT
 CAAGATGCTCTCTGAGCTGAAGGAAGAATACGACGACTTGCCCGAGTCTGAGCAATTCGGTGTGGTAAATG
 GGGACCGTACCTCGCTGCGACCCGACTTAAACGCGATCCTGTTTAAACTCCAGTTTTTCAGAGCAAGTTG
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 CCTCCTTCGTCAAGGACGCCAGGAGCAATACAATAAGTTGAGGATGATGCACAGCAACATGAAAACCT
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 CTCCATAATTTAGAAATATGTTTTGCAAGCCGTCAAGGAGAATCAGAAACGCAGGGAAACCGAAGAGA
 AAATGAGACGAGCCAAGCTCGCAAAGGAGAAGGCAGAAAAGGAACGCCTTGAGAAGCAGCAGAAAAGGGA
 ACAGCTGATTGATATGAACGCTGAAGGCGACGAAACCGGAGTGTGGATTCCCTGTTGGAGGCCCTCAA
 AGCGGCGCCGATTCCGGCGAAAGAGGGGCCAGACAGGTAACCGCAAGGCTGGCTGCGCTGTGACTT
 CTCTGCTTGCAGCGAGTTGACCAAGACGATGCCATGGCTCCCGACCTGTGAAAGTACCAAAAAAGTC
 TGAGGGCGTGCCGACGATTCTGGAAGAAGCCAAGGAGCTGGTTGGGAGAGCCAGC

ACGCGTACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR215994 representing NM_007858
 Red=Cloning site Green=Tags(s)

MEPSGGGLGPRGTRDKKGRSPDELPATGGDGGKHKKFLERFTSMRIKKEKEKPNSAHRNSSASYGDDP
 TAQSLQDISDEQVLVFEQMLVDMNLNEEKQQLREKDIVIKREMVSYQLHTSKAGMNQKESSRSAMMYI
 QELRSGLRDMHLLSCLESLRVSLNPNVSWVQTFGAEGLASLLDILKRLHDEKEETSGNYDSRNQHEIIR
 CLKAFMNNKFGIKTMLETEEGILLVRAMDPVAVPNMMIDAAKLLSALCILPQPEDMNERVLEAMTERAEM
 DEVERFQPLLDGLKSGTSIALKVGCLQLINALITPAEELDFRVHIRSELMRLGLHQVLQELREIENEDMK
 VQLCVFDEQGDDEFFDLKGRLLDIRMEMDDFGEVFIILNTVKDSKAEPHFLSILQHLLLRNDYEARPQ
 YYKLIIEECVSIVLHKNGTDPDFKCRHLQIDIERLVDQMIDKTKVEKSEAKATELEKKLDSEL TARHELQ
 VEMKMKMENDFEQKLQDLQGEKDALDSEKQQITAQKQDLEAEVSKLTGEVAKLSKELEDAKNEMASLSAVV
 VAPSVSSAAVPPAPPLPGDSGTVIPPPPPPPPLPGGVVPPSPPLPPGTCIPPPPPPLPGGACIPPPQPL
 GSAAIPPPPLPGVASIPPPPLPGATAIPPPPLPGATAIPPPPLPGGTGIPPPPPPLPGSVGVPPPP
 PLPGGGLPPPPPPFGAPGIPPPPPGMGVPPPPFGFVPAAPVLPFGLTPKKVYKPEVQLRRPNWSKF
 VAEDLSQDCFWTKVKEDRFENNELFAKLTLAFSAQTKTSKAKKDQEGGEEKSVQKKVKELKVLDSKTA
 QNLSIFLGSFRMPYQEIKNVILEVNEAVLTESMIQNLIKQMPPEQLKMLSELKEEYDDLAESEQFVVM
 GTVPRLRPRLNAILFKLQFSEQVENIKPEIVSVTAACEELRKENFSLSLELTLVGNMAGSRNAGAF
 GFNISFLCKLRDTSADQKMTLLHFLAELCENDHPEVLKFPDELAHVEKASRVSANLQKSLDQMKKQIA
 DVERDVQNFPAATDEKDKFVEKMTSFVKDAQEQYNKLRMMHSNMETLYKELGDYFVDFPKKLSVEEFFMD
 LHNFRNMFQAVKENQKRRETEEKMRRAKLAKEKAERLEKQKREQLIDMNAEGDETGVMSLLEALQ
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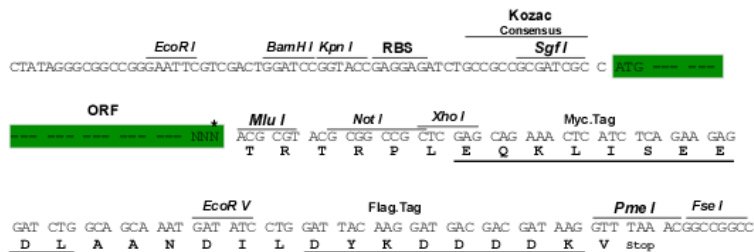
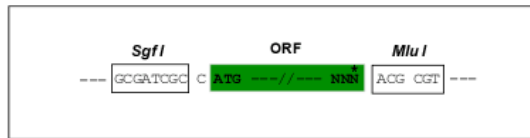
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



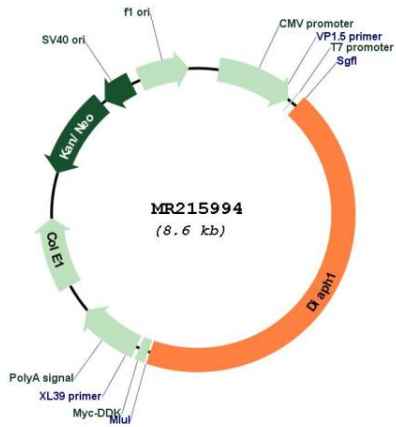
* The last codon before the Stop codon of the ORF

ACCN: NM_007858

ORF Size: 3765 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:	<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_007858.1 , NM_007858.2 , NM_007858.3 , NM_007858.4 , NP_031884.1
RefSeq Size:	5666 bp
RefSeq ORF:	3768 bp
Locus ID:	13367
UniProt ID:	O08808
Cytogenetics:	18 19.71 cM
MW:	139.3 kDa
Gene Summary:	This gene encodes a member of the formin family of proteins that play important roles in cytoskeletal rearrangement by nucleation of actin filaments. Mice lacking the encoded protein develop age-dependent myeloproliferative defects resembling human myeloproliferative syndrome and myelodysplastic syndromes. Trafficking of T lymphocytes to secondary lymphoid organs and egression of thymocytes from the thymus are impaired in these animals. Lack of the encoded protein in T lymphocytes and thymocytes also reduces chemotaxis. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Sep 2016]

Product images:



Circular map for MR215994