

## Product datasheet for **RG235171**

### DIAPH3 (NM\_001258369) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DIAPH3 (NM_001258369) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DIAPH3
Synonyms:	AN; AUNA1; DIA2; diap3; DRF3; mDia2; NSDAN
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG235171 representing NM_001258369 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAACGGCACCAGCCGCGGCTGCACCACCCGGCCCAAGGCTCAGCCGCTGGGACTCCCTACCCTTCT  
CAGCCTCTCTCCGCGGCTGCCGGAAAGCAAGATGCCGCGCAGGAAGGGCCCCAACACCCTCCGCCGCC  
CAGTGGCCCCGAGGAGCCTGGGGAGAAGCGCCCAAGTTTCATTTAAATATTAGGACTGACGGATGAT  
ATGCTGGACAAAATTTGCCAGCATAAGAATTCAGGGAGCAAGAAAGAGAGACCTCCACTTCCAACCTGA  
AGACTGCATTTGCAAGCAGTGATTGCTCAGCAGCACCTTAGAGATGATGGAGAATTTCCAAGCCACT  
GTCAGAGAATGAACTCTTAGAACTTTTTGAAAAATGATGGAAGATATGAATTTAAATGAAGATAAAAAAG  
GCACCATTGCGGGAAAAGGACTTCAGTATCAAAAAAGAAATGGTATGCAGTACATTAATACTGCTTCTA  
AGACAGGAAGTCTTAAGAGAAGCCGACAGATCTCACCTCAGGAATTCATTCATGAGCTGAAAATGGGGTC  
TGCAGATGAGAGACTTGTACATGCCTGGAGTCTCTCCGAGTGTCTTTGACCAGCAATCCTGTGAGTTGG  
GTGAAAGCTTTGGACATGAAGGGCTTGGATTATTATTAGACATTTTGAAAAACTGATTAGTGGAAAAA  
TCCAAGAAAAGTTGTAAGAAAAATCAACATAAAGTCATACAGTGTCTAAAAGCCCTGATGAATACGCA  
GTATGGCTTGAAAGAATTATGAGTGAGGAGAGGAGCCTTTCCTTATTGGCCAAAGCCGTGGATCCCAGA  
CACCCCAATGATGACAGATGTGGTTAACTTCTCTCGGATGCAATTGTAGGGGAAGAAAGCATCC  
TTGAAGAAGTTTTAGAAGCTTTAACTTCAGCTGGTGAAGAAAAAAAATTGACAGATTTTTTTGATTGT  
GGAAGGCCTCCGGCACAATTCAGTTCAACTGCAAGTAGCTTGTATGCAGCTCATCAATGCCTGTTTACA  
TCTCCTGATGATTTGGATTTAGGCTTACATCAGAAATGAATTTATGCGTTGTGGATTGAAAGAGATAT  
TGCCAAATTTAAATGCATTAAGAATGATGGCCTGGATATCCAACCTAAAGTCTTTGATGAGCATAAAGA  
AGAAGATTTGTTGAGTTATCCCATCGCCTTGAAGATATTAGAGCTGAACCTGATGAAGCATATGATGTT  
TACAACATGGTGTGGAGCACAGTTAAAGAACTAGAGCAGAGGGATTTTTATTTCTATTCTTCAGCATC  
TTTTGCTGATTCGAAATGATTATTTATAAGGCAACAATACTTCAAATTAATTGATGAGTGTGATCCCA  
GATTGTATTGCATAGAGATGGAATGGATCCAGACTTCACATATCGAAAAAGACTAGATTTAGATTTAAC



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CAGTTTGTAGACATTTGCATAGATCAAGCAAACCTAGAAGAGTTTGAAGAGAAAGCATCAGAACTTTACA  
 AGAAATTTGAAAAAGAGTTTACCACCACCAAGAACTCAGGCTGAATTGCAGAAAAAGAGGCAAAGAT  
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 CCATTTGGGTGAAACCAAGAAAGAATTTAAACCTGAAATCAGCATGAGAAGATTGAAATGGTTAAGA  
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 ATAATAGGATACTATGCCATTGATGTGAAGAAGGTGTCTGTGGAAGACTTCTTACTGACCTGAATAACT  
 TCAGAACCACATTATGCAAGCAATAAAGGAGAATATCAAAAAAGAGAAGCAGAGAGAAAAAGAAAAACG  
 TGTGAGAATAGCTAAAGAATTAGCAGAGCGAGAAAGACTCGAACGCCAACAAAAGAAAAAGCGTTTATTA  
 GAAATGAAGACTGAGGTGATGAGACAGGAGTGTGGATAATCTGCTGGAGCCTTGCAGTCCGGGGCTG  
 CCTTCCGCGACAGAAGAAAAAGGACACCGATGCCAAAAGATGTTCCGCGAGAGTCTCAGTCCAATGTCTCA  
 GAGGCTGTTCTGAAAGTTGTAACCATGGTAATAAACCGTATTTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG235171 representing NM\_001258369  
 Red=Cloning site Green=Tags(s)

MERHQPRLLHHPAQGSAAGTPYPSSASLRGCRSKMPRRKGPQHPPPSGPEEPGEKRPKFHLNIRTLTDD  
 MLDKFASIRIPGSKKERPLPNLKTAFASDDCSAAPLEMENFPKPLSENELLELEFKMMEDMNLNEDKK  
 APLREKDFSIKKEMVMQYINTASKTGSLKRSRQISQEFIHCLKMGSADERLVTCLLESLRVSLTSNPVSW  
 VESFGHEGLGLLLDILEKLSGKIQEKVVKKNQHKVIQCLKALMNTQYGLERIMSEERSLSLLAKAVDPR  
 HPNMMTDVVKLLSAVCIVGEESILEEVLEALTSAGEEKKIDRFFCIVEGLRHNSVQLQVACMQLINALVT  
 SPDDLDFRLHIRNEFMRCGLKEILPNLKCICKNDGLDIQLKVFDEHKEEDLFELSHREDIRAELEAYDV  
 YNMVWSTVKETRAEGYFISILQHLLLIRNDYFIRQQYFKLIDECVSIIVLHRDGMDFTYRKRLLDLT  
 QFVDICIDQAKLEEFEEKASELYKKFEKEFTDQETQAEQKKEAKINELQAEQAFKSQFGALPADCNIL  
 PLPPSKEGGTGHSAALPPPPLPSGGGVPPPPPPPPPPPLPGMRMPFSGPVPPPPPLGFLGGQNSPPLPIL  
 PFGLPKKKEFKPEISMRRNLWLKIRPHEMTENCFWIKVNNENKYENVDLLCKLENTFCCQQKEREEEDIE  
 EKKSIIKKIKELKFLDSKIAQNL SIFLSSFRVPYEEIRMMILEVDETRLAESMIQNL IKHLPDQEQLNSL  
 SQFKSEYNSLCEPEQFVVVMSNVKRLRPRLSAILFKLQFEEQVNNIKPDIMAVSTACEEIKKSKSF SKLL  
 ELVLLMGNYMNAGSRNAQTFGFNLSSLCKLKDTKSADQKTTLLHFLVEICEEKYPDILNFVDDLEPLDKA  
 SKVSVETLEKNLRQMGRQLQQLEKELETFPPPEDLHDKFVTMMSRFVISAKEYETLSKLHENMEKLYQS  
 IIGYYAIDVKKVSVEFDLTDLNNFRTTFMQAIKENIKKREAEKEKRVRIAKELAEERLERQKKKRL  
 EMKTEGDETGVMNDLLEALQSGAAFRDRRKRTPMPKDVRQSLSPMSQRPVLKVCNHNKPYL

TRTRPLE – GFP Tag – V

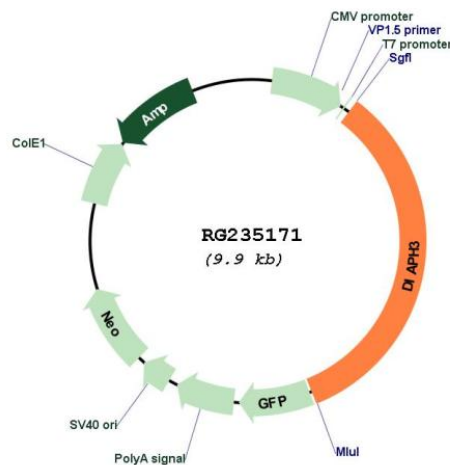
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001258369

ORF Size: 3336 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001258369.1, NP_001245298.1</u>
<b>RefSeq Size:</b>	3564 bp
<b>RefSeq ORF:</b>	3339 bp
<b>Locus ID:</b>	81624
<b>UniProt ID:</b>	<u>Q9NSV4</u>
<b>Cytogenetics:</b>	13q21.2
<b>Protein Pathways:</b>	Regulation of actin cytoskeleton
<b>Gene Summary:</b>	This gene encodes a member of the diaphanous subfamily of the formin family. Members of this family are involved in actin remodeling and regulate cell movement and adhesion. Mutations in this gene are associated with autosomal dominant auditory neuropathy 1. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2012]