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Product datasheet for RC216318

DIAPH1 (NM_005219) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DIAPH1 (NM_005219) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DIAPH1
Synonyms:	DFNA1; DIA1; DRF1; hDIA1; LFHL1; SCBMS
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC216318 representing NM_005219 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGAGCCGCCCGGCGGGAGCCTGGGGCCCGGCCGCGGGACCCGGGACAAGAAGAAGGGCCGGAGCCCAG ATGAGCTGCCCTCGGCGGGCGGCGACGGCGGCAAATCTAAGAAATTTACTCTGAAGCGGCTCATGGCAGA TGAGCTGGAGAGATTTACCAGCATGAGAATTAAGAAGGAGAAGGAAAAGCCCAATTCTGCTCATAGAAAT TCTTCTGCATCATATGGGGATGATCCCACAGCACAGTCATTGCAAGATGTTTCAGATGAACAAGTGCTGG TTCTCTTTGAACAGATGCTGCTGGATATGAACCTGAATGAGGAGAAACAGCAACCTTTGAGGGAGAAGGA CATCATCATCAAGAGGGAGATGGTGTCCCAATACTTGTACACCTCCAAGGCTGGCATGAGCCAGAAGGAG AGCTCTAAGTCTGCCATGATGTATATTCAGGAGTTGAGGTCAGGCTTGCGGGATATGCCTCTGCTCAGCT GCCTGGAGTCCCTTCGTGTGTCTCTCAACAACAACCCTGTCAGTTGGGTGCAAACATTTGGTGCTGAAGG CTTGGCCTCCTTATTGGACATTCTTAAACGACTTCATGATGAGAAAGAAGAGACTGCTGGGAGTTACGAT AGCCGGAACAAGCATGAGATCATTCGCTGCTTGAAAGCTTTTATGAACAACAAGTTTGGAATCAAGACCA TGTTGGAGACAGAAGAAGGAATCCTACTGCTGGTCAGAGCCATGGATCCTGCTGTTCCCAACATGATGAT TGATGCAGCTAAGCTGCTTTCTGCTCTTTGTATTCTACCGCAGCCAGAGGACATGAATGAAAGGGTTTTG GAGGCAATGACAGAAAGAGCTGAGATGGATGAAGTGGAACGTTTCCAGCCGCTGCTGGATGGATTAAAAA GTGGAACCACTATTGCACTGAAGGTTGGATGCCTACAGCTGATCAATGCTCTCATCACACCAGCGGAGGA ACTTGACTTCCGAGTTCACATCAGAAGTGAACTGATGCGTTTGGGGCTACATCAGGTGTTGCAGGACCTT CGAGAGATTGAAAATGAAGATATGAGAGTGCAACTAAATGTGTTTGATGAACAAGGGGAAGAGGATTCCT ATGACCTGAAGGGACGGCTGGATGACATTCGCATGGAGATGGATGACTTTAATGAAGTCTTTCAGATTCT CTTAAACACAGTGAAGGATTCAAAGGCAGAGCCACACTTCCTTTCCATCCTGCAGCACTTACTCTTGGTC CGAAATGACTATGAGGCCAGACCTCAGTACTATAAGTTGATTGAAGAATGTATTTCCCAGATAGTTCTGC ACAAGAACGGGGCTGATCCTGACTTCAAGTGCCGGCACCTCCAGATTGAGATTGAGGGATTAATTGATCA AATGATTGATAAGACAAAGGTGGAGAAATCTGAAGCCAAAGCTGCAGAGCTGGAAAAGAAGTTGGACTCA GAGTTAACAGCCCGACATGAGCTACAGGTGGAAATGAAAAAGATGGAAAGTGACTTTGAGCAGAAGCTTC

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Protein Sequence:

>RC216318 representing NM_005219
Red=Cloning site Green=Tags(s)

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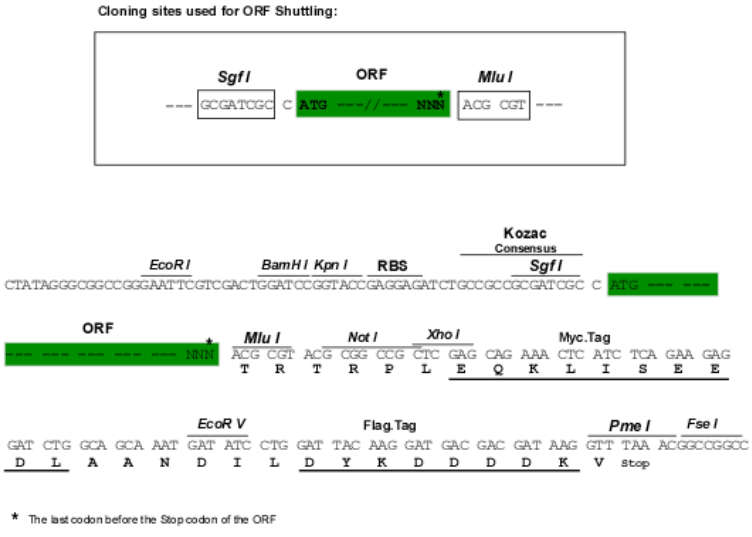
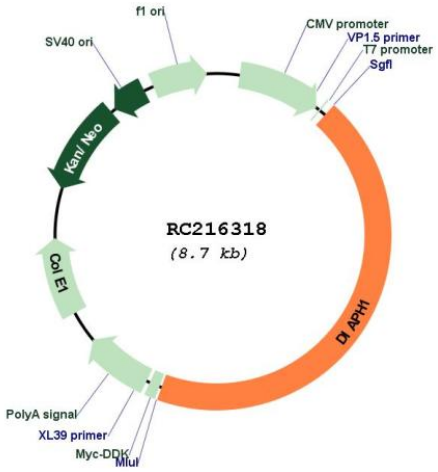
Chromatograms: https://cdn.origene.com/chromatograms/mk6850_c03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



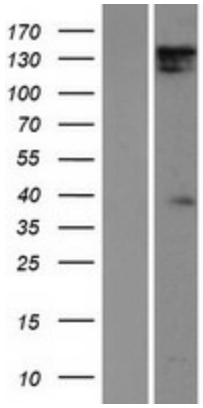
Plasmid Map:



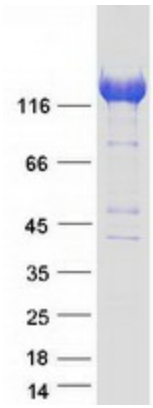
ACCN:	NM_005219
ORF Size:	3816 bp
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own 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_005219.5
RefSeq Size:	5745 bp
RefSeq ORF:	3819 bp
Locus ID:	1729
UniProt ID:	O60610

Cytogenetics:	5q31.3
Domains:	FH2
Protein Families:	Druggable Genome, Stem cell - Pluripotency
Protein Pathways:	Focal adhesion, Regulation of actin cytoskeleton
MW:	141.2 kDa
Gene Summary:	This gene is a homolog of the Drosophila diaphanous gene, and has been linked to autosomal dominant, fully penetrant, nonsyndromic sensorineural progressive low-frequency hearing loss. Actin polymerization involves proteins known to interact with diaphanous protein in Drosophila and mouse. It has therefore been speculated that this gene may have a role in the regulation of actin polymerization in hair cells of the inner ear. Alternatively spliced transcript variants encoding distinct isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Western blot validation of overexpression lysate (Cat# [LY417437]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216318 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DIAPH1 protein (Cat# [TP316318]). The protein was produced from HEK293T cells transfected with DIAPH1 cDNA clone (Cat# RC216318) using MegaTran 2.0 (Cat# [TT210002]).