

## Product datasheet for **RC231311**

### Matrin 3 (MATR3) (NM\_001194956) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Matrin 3 (MATR3) (NM_001194956) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Matrin 3
Synonyms:	ALS21; MPD2; VCPDM
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC231311 representing NM\_001194956  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTTAGGAGCGCAGTGGCGGCGCAACCAGCCTTCTAGGGCGGCGGAGGAGTGGAGTCAACATATCAATG  
 GAGCAAGTCACAGTCGTCGATGCCAGCTTCTTCTTGAAATCTACCCAGAATGGAATCCTGACAATGATAC  
 AGGACACACAATGGGTGATCCATTCATGTTGCAGCAGTCTACAAATCCAGCACCAGGAATCTGGGACCT  
 CCACCTCCCTCATTTTCATCTTGGGGACCAGCAGTTGGACCAAGAGGAAATCTGGGTGCTGGAAATGGAA  
 ACCTGCAAGGACCTAGACACATGCAGAAAGGCAGAGTGGAAACTAGCAGAGTTGTTACATCATGGATTT  
 TCAACGAGGGAAAAAATTGAGATACCAGCTATTACAGCTGGTAGAACCTTTGGAGTCATTTCAAATCAT  
 CTGATTCTAAATAAAATTAATGAGGCATTTATTGAAATGGCAACCACAGAGGATGCTCAGGCCGAGTGG  
 ATTATTACACAACCACACCAGCGTTAGTATTTGGCAAGCCAGTGAGAGTTCATTTATCCCAGAAGTATAA  
 AAGAATAAAGAAACCTGAAGGAAAGCCAGATCAGAAGTTTGATCAAAAGCAAGAGCTTGGACGTGTGATA  
 CATCTCAGCAATTTGCCGCATTCTGGCTATTCTGATAGTCTGTTCTCAAGCTTGTCTGAGCCTTATGGGA  
 AAATAAAGAATTACATATTGATGAGGATGAAAAGTCAGGCTTTTATTGAGATGGAGACAAGAGAAGATGC  
 AATGGCAATGGTTGACCATTTGTTTGAAAAAGCCCTTTGGTTTCAGGGGAGATGTGTGAAGGTTGACCTG  
 TCTGAGAAATATAAAAACTGGTCTGAGGATCCAAACAGAGGCATTGATTTACTGAAAAAGATAAAT  
 CCCGAAAAAGATCTTACTCTCCAGATGGCAAAGAACTCCAAGTGATAAGAAATCCAAAACCTGATGGTTC  
 CCAGAAGACTGAGAGTTCAACCGAAGGTAAGAACAAGAAGAGAAGTCCGGTGAAGATGGTGAGAAAAGAC  
 ACAAAGGATGACCAGACAGAGCAGGAACCTAATATGCTTCTTGAATCTGAAGATGAGTACTTGTAGATG  
 AAGAAGAAGCAGCAGCACTGCTAGAAAGTGGCAGTTTCAAGTGGAGACGAGACCGATCTTGTAAATTTAGG  
 TGATGTGGCTTCTGATGGGAAAAAGGAACCATCAGATAAAGCTGTGAAAAAAGATGGAAGTGTCTCAGCA  
 GCAGCAAAGAAAAAGCTTAAAAAGGTGGACAAGATCGAGGAACCTGATCAAGAAAACGAAGCAGCGTTGG  
 AAAATGGAATTAATAATGAGGAAAAACAGAACCGGTGCTGAATCTTCTGAGAACGCTGATGATCCCAA  
 CAAAGATACAAGTAAAAACGAGATGGTCAAAGTATGAGAACAAAGGACGACTATACAATCCCAGATGAG  
 TATAGAATTGGACCATATCAGCCCAATGTTCTGTTGGTATAGACTATGTGATACCTAAAACAGGGTTTT  
 ACTGTAAGCTGTGTTCACTCTTTTATACAAATGAAGAAGTTGCAAAGAATACTCATTGCAGCAGCCTTCC  
 TCATTATCAGAAATTAAGAAATTTCTGAATAAATGGCAGAAGAACGCAGACAGAAGAAGGAAACT

**ACGCGT**ACGCGGCGGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC231311 representing NM\_001194956  
 Red=Cloning site Green=Tags(s)

MLGAQWRRNQPSRAAEEWSQHINGASHSRRCQLLEIYPEWNPNDTGHTMGDPFMLQQSTNPAPGILGP  
 PPPSFHLGGPAVGPRNLGAGNGNLQGPRHMQGRVETSRVVHIMDFQRGNLRYQLQLVEPFGVISNH  
 LILNKINEAFIEMATTEDAQAADVYTTTPALVFGKPVVHLSQKYKRIKKPEGKPDQKFDQKQELGRVI  
 HLSNLPHSGYSDSAVLKLAEPYGKIKNYILMRMKSQAFIEMETREDAMAMVDHCLKKALWFQGRCKVVDL  
 SEKYKKLVLRIPNRGIDLLKDKSRKRSYSPDGKESPSDKKSKTDGSQKTESSTEGKEQEESGEGEKEK  
 TKDDQTEQEPNMLLESEDELLVDEEEAALLESGSSVGDETDLANLGDVASDGKKEPSDKAVKKDGSASA  
 AAKKKLKKVDKIEELDQENEAALENGIKNEENTEPGAESSENADDPNKDTSENADGQSDENKDDYIPDE  
 YRIGPYQPNVPVIGIDYVIPKTFYCKLCSLFYTNEEVAKNTHCSSLPHYQKLLKFLNKLAEERRQKKT

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8067\\_c04.zip](https://cdn.origene.com/chromatograms/mk8067_c04.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001194956

**ORF Size:** 1677 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\\_001194956.1](#), [NP\\_001181885.1](#)

**RefSeq ORF:** 1680 bp

**Locus ID:** 9782

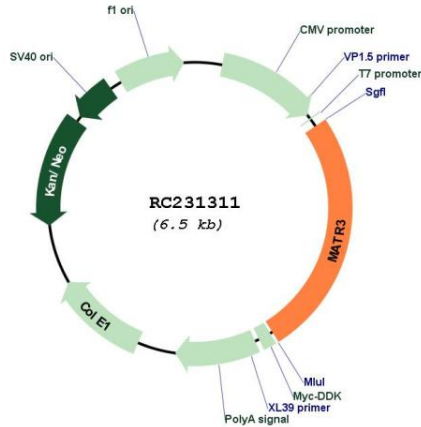
**UniProt ID:** [P43243](#)

**Cytogenetics:** 5q31.2

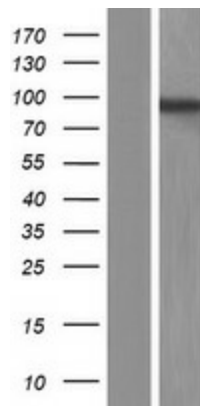
**MW:** 63 kDa

**Gene Summary:** This gene encodes a nuclear matrix protein, which is proposed to stabilize certain messenger RNA species. Mutations of this gene are associated with distal myopathy 2, which often includes vocal cord and pharyngeal weakness. Alternatively spliced transcript variants, including read-through transcripts composed of the upstream small nucleolar RNA host gene 4 (non-protein coding) and matrin 3 gene sequence, have been identified. Pseudogenes of this gene are located on chromosomes 1 and X. [provided by RefSeq, Aug 2013]

**Product images:**



Circular map for RC231311



Western blot validation of overexpression lysate (Cat# [LY434310]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231311 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).