

Product datasheet for **RC238631**

Matrin 3 (MATR3) (NM_001282278) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Matrin 3 (MATR3) (NM_001282278) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MATR3
Synonyms:	ALS21; MPD2; VCPDM
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RC238631 representing NM_001282278
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGGTGATCCATTCATGTTGCAGCAGTCTACAAATCCAGCACCAGGAATTCGGGACCTCCACCTCCCT
 CATTTCATCTTGGGGACCAGCAGTTGGACCAAGAGGAAATCTGGGTGCTGGAAATGGAAACCTGCAAGG
 ACCTAGACACATGCAGAAAGGCAGAGTGGAAACTAGCAGAGTTGTTACATCATGGATTTCAACGAGGG
 AAAAACTTGAGATACCAGCTATTACAGCTGGTAGAACCATTTGGAGTCATTTCAAATCATCTGATTCTAA
 ATAAAAATTAATGAGGCATTTATTGAAATGGCAACCACAGAGGATGCTCAGGCCGAGTGGATTATTACAC
 AACACACCAGCGTTAGTATTTGGCAAGCCAGTGAGAGTTCATTTATCCCAGAAGTATAAAAAGATAAAG
 AACCTGAAGGAAAGCCAGATCAGAAGTTTGATCAAAAGCAAGAGCTTGGACGTGTGATACATCTCAGCA
 ATTTGCCGATTCTGGCTATTCTGATAGTCTGTTCTCAAGCTTGTGAGCCTTATGGGAAAATAAAGAA
 TTACATATTGATGAGGATGAAAAGTCAGGCTTTTATTGAGATGGAGACAAGAGAAGATGCAATGGCAATG
 GTTGACCATTGTTGAAAAAAGCCCTTTGGTTTCAGGGGAGATGTGTGAAGGTTGACCTGTCTGAGAAAT
 ATAAAAAAGTGGTCTGAGGATCCAAAACAGAGGCATTGATTTACTGAAAAAAGATAAATCCCGAAAAAG
 ATCTTACTCTCCAGATGGCAAAGAATCTCCAAGTGATAAGAAATCCAAAAGTGGTCCCGAAGACT
 GAGAGTTCAACCGAAGGTAAAGAACAAGAAGAGAAGTCCGGTGAAGATGGTGAGAAAGACACAAAGGATG
 ACCAGACAGAGCAGGAACCTAATATGCTTCTTGAATCTGAAGATGAGCTACTTGTAGATGAAGAAGAAGC
 AGCAGCACTGTAGAAAGTGGCAGTTCAAGTGGGAGACGAGACCGATCTTGCTAATTTAGGTGATGTGGCT
 TCTGATGGGAAAAAGGAACCATCAGATAAAGCTGTGAAAAAAGATGGAAGTGTTCAGCAGCAGCAAAGA
 AAAAGCTTAAAAAGTGGACAAGATCGAGGAATTGATCAAGAAAACGAAGCAGCGTTGGAAAATGGAAT
 TAAAAATGAGGAAAAACACAGAACCAGGTGCTGAATCTTCTGAGAACGCTGATGATCCCAACAAAGATACA
 AGTGAACACGAGATGGTCAAAGTATGAGAACAAGGACGACTATACAATCCCAGATGAGTATAGAATTG
 GACCATATCAGCCCAATGTTCTCTGTTGGTATAGACTATGTGATACCTAAAAACAGGGTTTTACTGTAAGCT
 GTGTTCACTCTTTTATACAAATGAAGAAGTTGCAAGAATACTCATTGCAGCAGCCTTCTCATTATCAG
 AAATTAAGAAATTTCTGAATAAATTGGCAGAAGAACGCAGACAGAAGAAGGAACT

ACCGGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238631 representing NM_001282278
 Red=Cloning site Green=Tags(s)

MGDPFMLQQSTNPAPGILGPPPPSFHLGGPAVGPRGNL GAGNGNLQGPRHMQKGRVETSRVVHIMDFQRG
 KNLRYQLQLVEPFGVISNHLILNKINEAFIEMATTEDAQAADVYTTTPALVFGKPVVRVHLSQYKRIK
 KPEGKPDQKFDQKQELGRVIHLSNLPHSGYSDSAVLKLAEPYGIKKNYILMRMKSQAFIEMETREDAMAM
 VDHCLKKALWFQGRVCKVDLSEKYKLVLRIPNRGIDLLKDKSRKRSYSPDGKESPSDKKSKTDGSGQKT
 ESSTEGKEQEEKSGEDGEKDTKDDQTEQEPNMLESEDELLVDEEEAAALLESGSSVGDGTDLANLGDVA
 SDGKKEPSDKAVKKDGSASAAAKKLLKVDKIEELDQENEAALENGIKNEENTEPGAESSENADDPNKDT
 SENADGQSDENKDDYTIPEYRIGPYQPNVPVGI DYVVPKTFYCKLCSLFYTNEEVAKNTHCSSLPHYQ
 KLKKFLNKLAEERRQKKE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

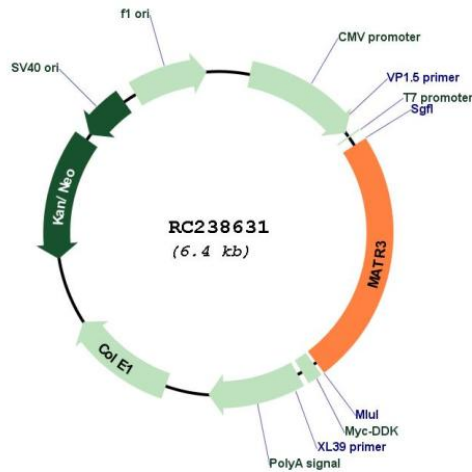
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001282278

ORF Size: 1527 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_001282278.1](#), [NP_001269207.1](#)

RefSeq Size: 4515 bp

RefSeq ORF: 1530 bp

Locus ID: 9782

UniProt ID: [P43243](#)

Cytogenetics: 5q31.2

MW: 57.2 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]