

## Product datasheet for **MR224759**

### Mtdh (NM\_026002) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mtdh (NM_026002) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Mtdh
Synonyms:	3D3; 3D3/Lyric; 2610103J23Rik; AEG-1; AV353288; D8Bwg1112e; Lyric
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR224759 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGCTGCACGAAGCTGGCAGGACGAGCTGGCCCAGCAGGCCGAGGAGGGCTCTGCCGGCTGCGGGAGT  
 TGCTCTCGGTCGGCCTAGGTTTTCTGCGCACGGAGTTGGCCTCGACCTGGGGCTAGAGCCGAAGCGGTA  
 CCCGGGCTGGGTGATCCTGGTGGCACC GGCGCTCTCGGGCTGCTCCTGTCTTCTCTTAGGTTACGGC  
 TGGGCCGCGGCTTGC GCCGGCGCCGCAAGAAGCGAAGGAGCCGCCCGCAAGCGGGAGGAGGCGGCC  
 CGCCGACTCCGGCCCCGACGACCTAGCCAGCTGAAGAATCTCAGAAGCGAGGAGCAAAAGAAGAAGAA  
 CCGGAAGAAGCTTCTGAAAAGCCAAACCAATGGACGGACTGTTGAAGTACCCGAGGATGAAGTTGTT  
 AGAAATCCCCGAAGTAACTGCAAAACAAGCACCAGAGACAGACAAGAAAAATGAAAAGTCAAAGAAAA  
 ATAGAAGAAATCAAAGTCAGATGCTAAAGCAGTCAAAAACAGTTCACGCCATGATGAAAAGGAAGTTGA  
 TGAAGGAGCCTGGGAACTAAAATTAGTCACAGAGAGAAAACGACAACAGCGTAAACGTGATAAAGTGCTG  
 ACTGATTCTGGTTCATTGGATTCAACTATCCCTGGGATAGAAAATATCATCACAGTTACCACCGAGCAAC  
 TTACAACATGCATCATTTCTGTTGGTTC AAGAAGAATAAAGGTGATTCTCATCTAAATGTTCAAGTTAG  
 CACTTTAAGTCTGAAAAGGAGATTCTACACTGCAGTTTCTTCAAGGCTGAATGAAAATCTTACTGTCT  
 AATGGAGGAGGCTGGAGTGAAAAGTCTGTAAAACCTCTCCTCACAATTGAGTGAGGAGAAGTGAAGTCTG  
 TCCACCTGCTTCTGCAGGCAAGAGGAAAACAGAGCCATCGGCTTGACTCAAGACACTGGTGACACTAA  
 TGCAATGGGAAAGACTGGGGAAGGAATTGGAGTGATCGCTCAATATTTCTGGCATTGGATCTACTGCT  
 GAGCCAGTTTCTCAGTCTACCATTCTGATTATCAGTGGGATGTTAGCCGTAATCAACCTTATATCGATG  
 ATGAATGGTCTGGTTAAATGGTTGTCTCTGCTGACCCTAGCTCAGACTGGAATGCACCAGCAGAGGA  
 GTGGGGAACTGGGTAGATGAAGATAGAGCTTCACTTCTGAAGTCCCAGGAACCAATTTCTAATGATCAA  
 AAGTTTTCAGATGATGATAAAGAAAAAGGGAGGGAGCTTCCAACTGGAAAATCTAAAAAGAAAAAGA  
 AGAAAAAGAAGAAGCAAGGGGAAGATAACTCTCACACACAGGACACAGAAGACCTAGAAAAGGACACTAG  
 AGAAGAGCTTCCAGTGAATACCTCAAAGCCGACCAAAACAGGAGAAAGCTTGTCCCTGAAGACCATG  
 AGCACTAGTGACCAGCTGAAGTACTCATCAAAAATAGCCAGCCTGTCAAGACTTCTCCTCTGCTATCT  
 CTGCCGAGCCATCTATTACCTTATCAAAGGTGACTCTGACAACAGCTCTCCCAAGTGCCACCGATGTT  
 ACAAGACACAGACAAGCCCAAGTCAAATGCTAAGCAAAACAGTGTGCTCCCTCACAGCAAGTCTGAA  
 ACTAAGTGGGAATCTCCAAAACAATAAAAAAGAAGAAAAGGCCAGACGGGAAACG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR224759 protein sequence  
 Red=Cloning site Green=Tags(s)

MAARSWQDELAQQAEEGSARLRELLSVLGLFRLTELGLDLGLEPKRYPGWVILVGTGALGLLLLFLLGYG  
 WAAACAGARKRRSPPRKREEAAPPTPAPDDLAQLKNLRSEEQKKKNRKKLPEKPKPNGRTVEVPEDEVV  
 RNPRSITAKQAPETDKKNEKSKKNKKKSKSDAKAVQNSSRHDGKEVDEGAWETKISHREKRQQRKRDKVL  
 TDSGLDSTIPGIENIITVTTEQLTTASFPVSGSKKNKGDSHLNVQVSNFKSGKGDSTLQVSSRLNENLTV  
 NGGGWSEKSVKLSSQLSEEKWSVPPASAGKRKTEPSAWTQDGTNANGKDWGRNWSDRSIFSGIGSTA  
 EPVSQSTTSDYQWDVSRNQPYIDDEWSGLNGLSSADPSSDWNAPAEWGNWVDEDRASLLKSEQEISNDQ  
 KVSDDDKEKGEALPTGKSKKKKKKKKQGEDNSHTQDTEDEKDTREELPVNTSKARPKQEKACSLKTM  
 STSDPAEVLIKNSQPVKTLPPAISAEPSITLSKGDSDNSSQVPPMLQDTPKPSNAKQNSVPPSQTKSE  
 TNWESPKQIKKKKKARRET

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



ACCN: NM\_026002

ORF Size: 1740 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\\_026002.2](#), [NM\\_026002.3](#), [NM\\_026002.4](#), [NP\\_080278.3](#)

RefSeq Size: 3680 bp

RefSeq ORF: 1740 bp

Locus ID: 67154

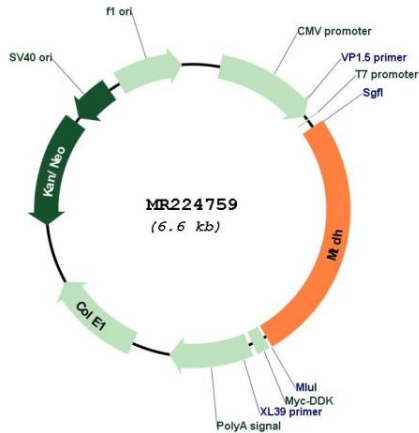
UniProt ID: [Q80WJ7](#)

Cytogenetics: 15 13.98 cM

MW: 63.8 kDa

Gene Summary: Downregulates SLC1A2/EAAT2 promoter activity when expressed ectopically. Activates the nuclear factor kappa-B (NF-kappa-B) transcription factor. Promotes anchorage-independent growth of immortalized melanocytes and astrocytes which is a key component in tumor cell expansion. Promotes lung metastasis and also has an effect on bone and brain metastasis, possibly by enhancing the seeding of tumor cells to the target organ endothelium. Induces chemoresistance (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR224759