

Product datasheet for **RC207238**

LYRIC (MTDH) (NM_178812) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LYRIC (MTDH) (NM_178812) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	LYRIC
Synonyms:	3D3; AEG-1; AEG1; LYRIC; LYRIC/3D3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC207238 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCTGCACGGAGCTGGCAGGACGAGCTGGCCCAGCAGGCCGAGGAGGGCTCGGCCGGCTGCGGGAAA
 TGCTCTCGGTTCGGCTTAGGCTTTCTGCGCACCGAGCTGGCCCTCGACCTGGGGCTGGAGCCGAAACGGTA
 CCCC GGCTGGGTGATCCTGGTGGCACTGGCGCGCTCGGGCTGCTGCTGTTTCTGCTGGGCTACGGC
 TGGGCCGCGGCTTGCGCCGGCTCCCGCAAAAAGCGGAGGAGCCGCCCGCAAGCGGGAGGAGGCGCGG
 CCGTGCCGGCGGCCCGCCGACGACCTGGCCTTGTGAAGAATCTCCGGAGCGAGGAACAGAAGAAGAA
 GAACCGGAAGAACTGTCCGAGAAGCCAAACCAATGGGCGGACTGTTGAAGTGGCTGAGGGTGAAGCT
 GTTCGAACACCTCAAAGTGAACAGCAAAGCAGCCACCAGAGATTGACAAGAAAAATGAAAAGTCAAAGA
 AAAATAAGAAGAAATCAAAGTCAAGTGTAAAGCAGTCAAACAGTTTACGCCATGATGAAAAGGAAGT
 TGATGAAGGAGCCTGGGAACTAAAATTAGTACAGAGAGAAACGACAGCAGCGTAAACGTGATAAGGTG
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 AACTTACAACCGCATCATTTCTGTTGGTTCCAAGAAGAATAAAGGTGATTCTCATCTAAATGTTCAAGT
 TAGCAACTTTAAATCTGGAAAAGGAGATTCTACTTTCAGGTTTCTTTCAGGATTGAATGAAAACCTCACT
 GTCAATGGAGGAGGCTGGAATGAAAAGTCTGTAAGTCTCTCACAGATCAGTGCAGGTGAGGAGAAGT
 GGAACCTCCGTTTACCTGCTTCTGCAGGAAAGAGGAAAGTGGAGTCAATATTTCTGGCATTGGG
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 AGAAAAAAGAAAAAGAAGAAGCAAGGTGAAGATAACTCTACTGCACAGGACACAGAAGATTAGAAAA
 AGAGATTAGAGAAGACCTTCCAGTGAATACCTCTAAAACCCGTCACAAACAGGAAAAAGCTTTTTCTTG
 AAGACCATAAGCACTAGTATCCAGCCGAAGTACTCGTCAAAAATAGCCAGCCTATCAAGACTCTCCAC
 CTGCTACTTCTACCGAGCCTCTGTAATCTTATCAAAAAGTATTCTGACAAGAGCTCTTCCAAGTGCC
 GCCAATACTACAAGAGACAGATAAATCCAAGTCAATACCAAGCAAAAATAGTGTGCCTCCTTACAGACC
 AAGTCTGAAACTAGCTGGGAATCTCCCAACAAAATAAAAAAGAAGAAAAAAGCCAGACGAGAACG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC207238 protein sequence
 Red=Cloning site Green=Tags(s)

MAARSWQDELAQQAEEGSARLREMLSVLGLRTELGLDLGLEPKRYPGWVILVGTGALGLLLLFLLYG
 WAAACAGSRKKRRSPRKREEAAVPAAPDDLALLKNLRSEEQKKKNRKKLSEKPKPNGRTVEVAEGEA
 VRTPQSVTAKQPPEIDKKNEKSKKNKKKSKSDAKAVQNSSRHDGKEVDEGAWETKISHREKRQQRKRDV
 LTDGSLDSTIPGIENITVTTEQLTTASFPVGSKKNKGDSHLNVQVSNFKSGKGDSTLQVSSGLNENLT
 VNGGGWNEKSVKLSSQISAGEEKWNSVSPASAGKRKAEPSAWSQDTGDANTNGKDWGRSWSDRSIFSGIG
 STAEPVSQSTTSQYQWVSRNQPYIDDEWSGLNGLSSADPNSDWNAPAEWGNWVDEERASLLKSQEP
 DDQKVSDDKEKGEALPTGKSKKKKKKKKQGEDNSTAQDTEELEKEIREDLPVNTSKTRPKQEKAFSL
 KTISTSDPAEVLVKNSQPIKTLPPATSTEPVILSKSDSDKSSSQVPPILQETDKSKSNTKQNSVPPSQ
 KSETSWESPKQIKKKKKARRET

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6134_f06.zip

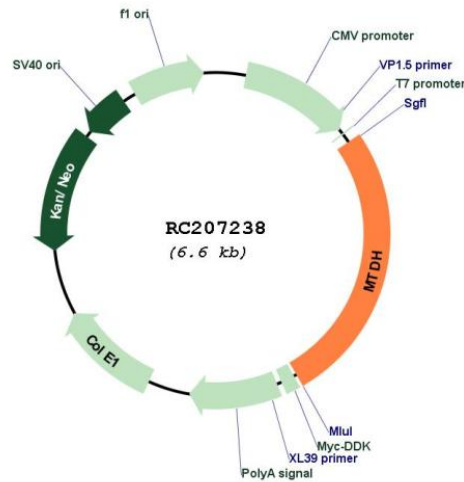
Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



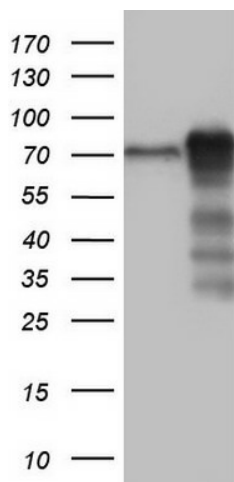
Plasmid Map:



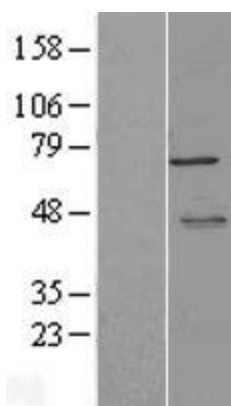
ACCN: NM_178812
 ORF Size: 1746 bp

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:	<ol style="list-style-type: none"> 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_178812.2 , NP_848927.1
RefSeq Size:	7667 bp
RefSeq ORF:	1749 bp
Locus ID:	92140
UniProt ID:	Q86UE4
Cytogenetics:	8q22.1
Protein Families:	Transmembrane
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.[UniProtKB/Swiss-Prot Function]

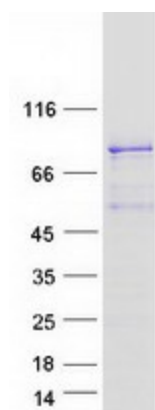
Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MTDH (Cat# RC207238, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MTDH(Cat# [TA804490]). Positive lysates [LY403614] (100ug) and [LC403614] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY403614]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207238 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MTDH protein (Cat# [TP307238]). The protein was produced from HEK293T cells transfected with MTDH cDNA clone (Cat# RC207238) using MegaTran 2.0 (Cat# [TT210002]).