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Product datasheet for RC224600

MFI2 (MELTF) (NM_005929) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MFI2 (MELTF) (NM_005929) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MFI2
Synonyms:	CD228; MAP97; MFI2; MTf; MTF1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC224600 representing NM_005929
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCGGGGTCCGAGCGGGGCTCTGTGGCTGCTCCTGGCTCTGCGCACCGTGCTCGGTGGCATGGAGGTGC
GGTGGTGCGCCACCTCGGACCCAGAGCAGCACAAGTGCGGCAACATGAGCGAGGCCTTCCGGGAAGCGGG
CATCCAGCCCTCCCTCCTCTGCGTCCGGGGCACCTCCGCCGACCACTGCGTCCAGCTCATCGCGGCCCAG
GAGGCTGACGCCATCACTCTGGATGGAGGAGCCATCTATGAGGCGGGAAAGGAGCACGGCCTGAAGCCGG
TGGTGGGCGAAGTGTACGATCAAGAGGTCGGTACCTCCTATTACGCCGTGGCTGTGGTCAGGAGGAGCTC
CCATGTGACCATTGACACCCTGAAAGGCGTGAAGTCCTGCCACACGGGCATCAATCGCACAGTGGGCTGG
AACGTGCCCGTGGGCTACCTGGTGGAGAGCGGCCGCCTCTCGGTGATGGGCTGCGATGTACTCAAAGCTG
TCAGCGACTATTTTGGGGGCAGCTGCGTCCCGGGGGCAGGAGAGACCAGTTACTCTGAGTCCCTCTGTCG
CCTCTGCAGGGGTGACAGCTCTGGGGAAGGGGTGTGTGACAAGAGCCCCCTGGAGAGATACTACGACTAC
AGCGGGGCCTTCCGGTGCCTGGCGGAAGGGGCAGGGGACGTGGCTTTTGTGAAGCACAGCACGGTACTGG
AGAACACGGATGGGAAGACGCTTCCCTCCTGGGGCCAGGCCCTGCTGTCACAGGACTTCGAGCTGCTGTG
CCGGGATGGTAGCCGGGCCGATGTCACCGAGTGGAGGCAGTGCCATCTGGCCCGGGTGCCTGCTCACGCC
GTGGTGGTCCGGGCCGACACAGATGGGGGCCTCATCTTCCGGCTGCTCAACGAAGGCCAGCGTCTGTTCA
GCCACGAGGGCAGCAGCTTCCAGATGTTCAGCTCTGAGGCCTATGGCCAGAAGGATCTACTCTTCAAAGA
CTCTACCTCGGAGCTTGTGCCCATCGCCACACAGACCTATGAGGCGTGGCTGGGCCATGAGTACCTGCAC
GCCATGAAGGGTCTGCTCTGTGACCCCAACCGGCTGCCCCCCTACCTGCGCTGGTGTGTGCTCTCCACTC
CCGAGATCCAGAAGTGTGGAGACATGGCCGTGGCCTTCCGCCGGCAGCGGCTCAAGCCAGAGATCCAGTG
CGTGTCAGCCAAGTCCCCCCAACACTGCATGGAGCGGATCCAGGCTGAGCAGGTCGACGCTGTGACCCTG
AGTGGCGAGGACATTTACACGGCGGGGAAGACGTACGGCCTGGTTCCCGCAGCCGGGGAGCACTATGCCC
CGGAAGACAGCAGCAACTCGTACTACGTGGTGGCCGTGGTGAGACGGGACAGCTCCCACGCCTTCACCTT
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TCAATGCCAGCTGCGTGCCCGTGAACAACCCCAAGAACTACCCCTCCTCGCTGTGTGCACTGTGCGTGGG
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GCCACAATTCCGAGCCCTGGGCTGCTGAGCTCAGGTCAGAGGACTATGAACTGCTGTGCCCCAACGGGGC
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CCCGACACCAACATCTTCACCGTGTATGGACTGCTGGACAAGGCCCAGGACCTGTTTGGAGACGACCACA
ATAAGAACGGGTTCAAAATGTTCGACTCCTCCAACTATCATGGCCAAGACCTGCTTTTCAAGGATGCCAC
CGTCCGGGCGGTGCCTGTCGGAGAGAAAACCACCTACCGCGGCTGGCTGGGGCTGGACTACGTGGCGGCG
CTGGAAGGGATGTCGTCTCAGCAGTGCTCGGGCGCAGCGGCCCCGGCGCCCGGGGCGCCCCTGCTCCCGC
TGCTGCTGCCCGCCCTCGCCGCCCGCCTGCTCCCGCCCGCCCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224600 representing NM_005929
Red=Cloning site Green=Tags(s)

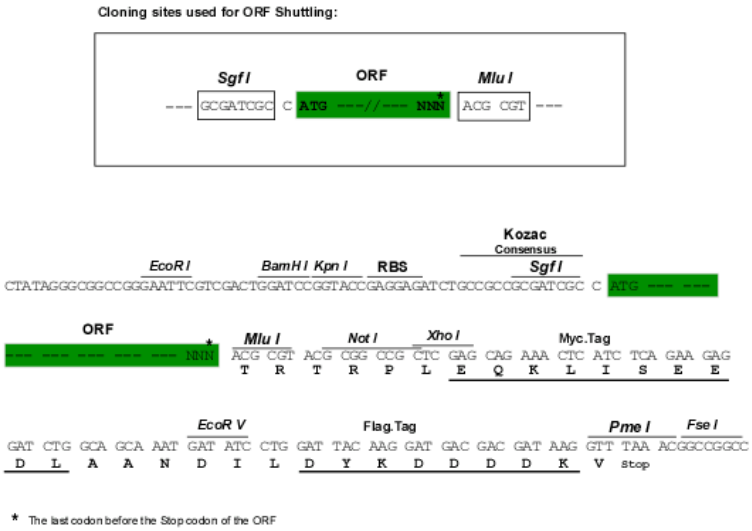
MRGPSGALWLLLALRTVLGGMEVRWCATSDPEQHKCGNMSEAFREAGIQPSLLCVRGTSADHCVQLIAAQ
EADAITLDGGAIYEAGKEHGLKPVVGEVYDQEVGTSYYAVAVVRRSSHVTIDTLKGVKSCHTGINRTVGW
NVPVGYLVESGRLSVMGCDVLKAVSDYFGGSCVPGAGETSYSESLCRLCRGDSSGEGVCDKSPLERYYDY
SGAFRCLAEGAGDVAFVKHSTVLENTDGKTLPSWGQALLSQDFELLCRDGSRADVTEWRQCHLARVPAHA
VVVRADTDGGLIFRLLNEGQRLFSHEGSSFQMFSSEAYGQKDLLFKDSTSELVPIATQTYEAWLGHEYLH
AMKGLLCDPNRLPPYLRWCVLSTPEIQKCGDMAVAFRRQRLKPEIQCVSAKSPQHCMERIQAEQVDAVTL
SGEDIYTAGKTYGLVPAAGEHYAPEDSSNSYYVVAVVRRDSSHAFTLDELRGKRSCHAGFGSPAGWDVPV
GALIQRGFIRPKDCDVLTAVSEFFNASCVPVNNPKNYPSSLCALCVGDEQGRNKCVGNSQERYYGYRGAF
RCLVENAGDVAFVRHTTVFDNTNGHNSEPWAAELRSEDYELLCPNGARAEVSQFAACNLAQIPPHAVMVR
PDTNIFTVYGLLDKAQDLFGDDHNKNGFKMFDSSNYHGQDLLFKDATVRAVPVGEKTTYRGWLGLDYVAA
LEGMSSQQCSGAAAPAPGAPLLPLLLPALAARLLPPAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2527_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005929

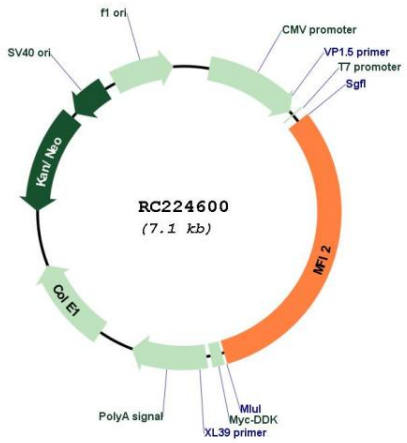
ORF Size: 2214 bp

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

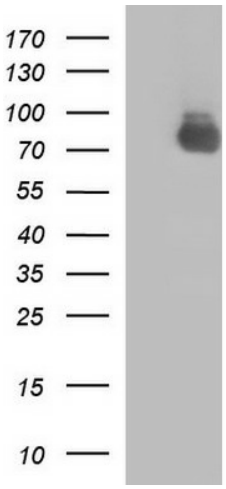
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_005929.6
RefSeq Size:	2377 bp
RefSeq ORF:	2217 bp
Locus ID:	4241
UniProt ID:	P08582
Cytogenetics:	3q29
Protein Families:	Druggable Genome
MW:	80.21 kDa
Gene Summary:	The protein encoded by this gene is a cell-surface glycoprotein found on melanoma cells. The protein shares sequence similarity and iron-binding properties with members of the transferrin superfamily. The importance of the iron binding function has not yet been identified. This gene resides in the same region of chromosome 3 as members of the transferrin superfamily. Alternative splicing results in two transcript variants. [provided by RefSeq, Jul 2008]

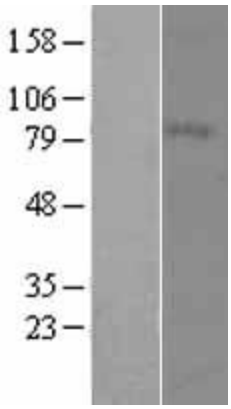
Product images:



Circular map for RC224600



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MFI2 (Cat# RC224600, 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-MFI2(Cat# [TA590215]). Positive lysates [LY401797] (100ug) and [LC401797] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY401797]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224600 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified MELTF protein (Cat# [TP324600]). The protein was produced from HEK293T cells transfected with MELTF cDNA clone (Cat# RC224600) using MegaTran 2.0 (Cat# [TT210002]).