

Product datasheet for RC200956

EFHD1 (NM_025202) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	EFHD1 (NM_025202) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	EFHD1
Synonyms:	MST133; MSTP133; PP3051; SWS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200956 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGTGAGGAGCTGGCGTGCAAGCTGGAGCGCCGGCTGCGGCGGAGGAGGCCGAGGAGAGTGGCC
CCCAGCTGGTCCCCTCGGCGCCCCAGCCCCGAGCCCAAGCCCGAGCCCGAGCCCTCCGCCCCGTGCGCC
CACGGCCAGCGCCGACGCGGAGCTGAGCGCCAGCTGAGCCGGCGGCTGGACATCAACGAGGGCGCTGCC
CGGCCCGGCGCTGCAGGTCTTCAACCCTACACGGAGTCCCGGAGTTCAGCCCGCCCTCATCAAGG
ACCTGGAGAGCATGTTCAAAGTGTATGACGCTGGGCGGATGGCTTCATCGACCTGATGGAGCTGAAGCT
GATGATGGAGAAGCTGGGGCCCCCAGACCCACCTGGGCTGAAGAGCATGATCAAGGAGTGGATGAG
GACTTCGATGGCAAGCTCAGCTTCCGGGAGTTCCTGCTCATTTCACAAGGCCCGCGCAGGGGAGCTGC
AGGAGGACAGTGGGCTGATGGCGCTGGCAAAGCTTCTGAGATCGATGTGGCCCTGGAGGGTGTCAAAGG
TGCCAAGAAGTCTTTGAAGCCAAGGTCCAAGCCTTGTCATCGGCCAGTAAGTTTGAAGCAGAGTTGAAA
GCTGAGCAAGATGAGCGGAAGCGGGAGGAGGAGGAGAGGCCGGCTCCGCCAGGCAGCTTCCAGAACTCA
AGGCCAACTTCAATACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >RC200956 protein sequence
 Red=Cloning site Green=Tags(s)

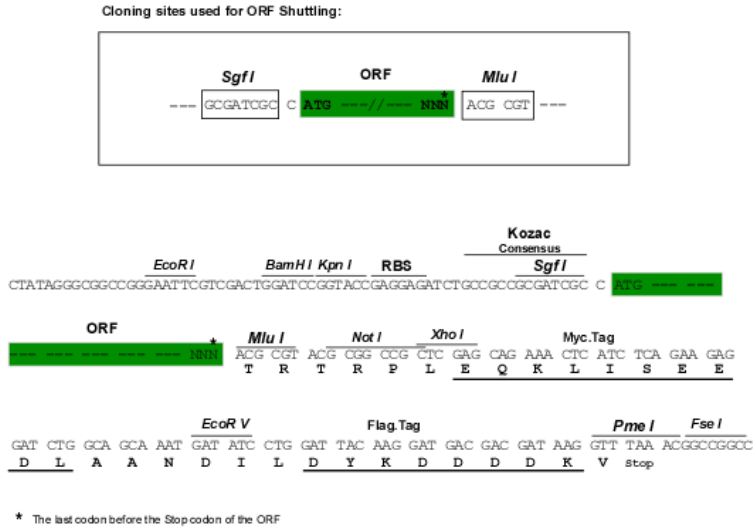
MASEELACKLERRLRREEAEESGPQLAPLGAPAPEPKPEPEPPARAPTASADAELSAQLSRRLDINEGAA
 RPRRCRVFNPYTEFPEFSRRLIKDLESMFKLYDAGRDGFIDLMEKLMMEKLGAPQTHLGLKSMIKEYVE
 DFDGKLSFREFLLIFHKAAGELQEDSGLMALAKLSEIDVALEGVKGAKNFFEAKVQALSSASKFEAEELK
 AEQDERKREEEERRLRQAAFQKLIKANFNT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

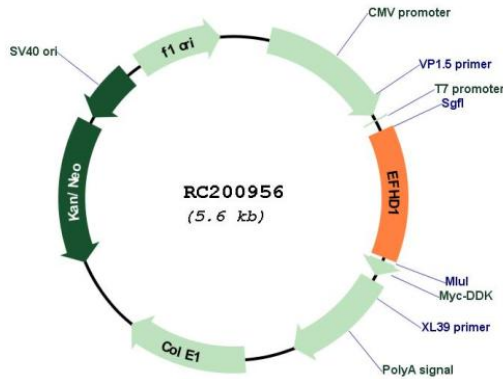
Chromatograms: https://cdn.origene.com/chromatograms/mk6034_a05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:

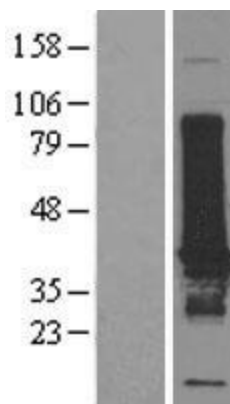


ACCN: NM_025202

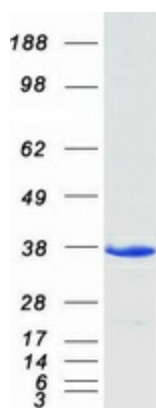
ORF Size: 717 bp

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_025202.4
RefSeq Size:	2000 bp
RefSeq ORF:	720 bp
Locus ID:	80303
UniProt ID:	Q9BUP0
Cytogenetics:	2q37.1
Domains:	EFh
MW:	26.9 kDa
Gene Summary:	This gene encodes a member of the EF-hand super family of calcium binding proteins, which are involved in a variety of cellular processes including mitosis, synaptic transmission, and cytoskeletal rearrangement. The protein encoded by this gene is composed of an N-terminal disordered region, proline-rich elements, two EF-hands, and a C-terminal coiled-coil domain. This protein has been shown to associate with the mitochondrial inner membrane, and in HeLa cells, acts as a novel mitochondrial calcium ion sensor for mitochondrial flash activation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2016]

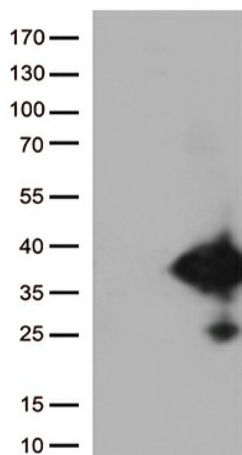
Product images:



Western blot validation of overexpression lysate (Cat# [LY403060]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200956 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified EFHD1 protein (Cat# [TP300956]). The protein was produced from HEK293T cells transfected with EFHD1 cDNA clone (Cat# RC200956) using MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY EFHD1 (Cat# RC200956, 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-EFHD1 (Cat# [TA812755])(1:2000). Positive lysates [LY403060] (100ug) and [LC403060] (20ug) can be purchased separately from OriGene.