

Product datasheet for **RG231809**

EFHD1 (NM_001243252) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: EFHD1 (NM_001243252) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: EFHD1
Synonyms: MST133; MSTP133; PP3051; SWS2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG231809 representing NM_001243252
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGGAGAGTTGCAGTATGACGCTGGGCGGGATGGCTTCATCGACCTGATGGAGCTGAAGCTGATGATGG
AGAAGCTGGGGGCCCCAGACCCACCTGGGCCTGAAGAGCATGATCAAGGAGGTGGATGAGGACTTCGA
TGGCAAGCTCAGCTTCCGGGAGTTCTGCTCATTTCCACAAGGCCGCGGCAGGGGAGCTGCAGGAGGAC
AGTGGCTGATGGCGCTGGCAAAGCTTTCTGAGATCGATGTGGCCCTGGAGGGTGTCAAAGGTGCCAAGA
ACTTCTTTGAAGCCAAGGTCCAAGCCTTGTTCATCGCCAGTAAGTTTGAAGCAGAGTTGAAAGCTGAGCA
AGATGAGCGGAAGCGGGAGGAGGAGGAGGCGCTCCGCCAGGCAGCCTTCCAGAACTCAAGGCCAAC
TTCAATACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231809 representing NM_001243252
Red=Cloning site Green=Tags(s)

MGELQYDAGRDFIDLMELKLMMEKLGAPQTHLGLKSMIKEVDEDFDGKLSFREFLLIFHKAAAGELQED
SGLMALAKLSEIDVALEGVKGAKNFFFAKVQALSSASKFEAEKAEQDERKREERERLRQAAFQKLVK
FNT

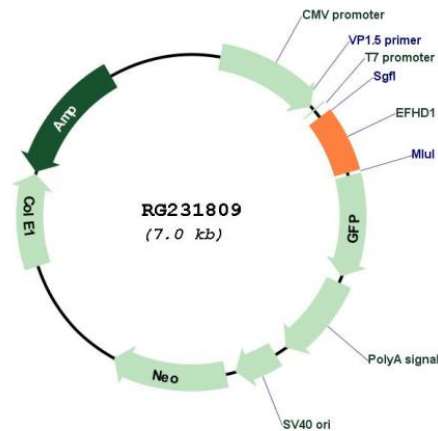
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI



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Cloning Scheme:

Plasmid Map:


ACCN: NM_001243252

ORF Size: 429 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:	<u>NM_001243252.1, NP_001230181.1</u>
RefSeq Size:	1607 bp
RefSeq ORF:	432 bp
Locus ID:	80303
UniProt ID:	<u>Q9BUP0</u>
Cytogenetics:	2q37.1
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]