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Product datasheet for MG211569

Farp2 (NM_145519) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Farp2 (NM_145519) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Farp2
Synonyms:	AI465173; BC009153; D030026M03Rik; Fir; mKIAA0793
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG211569 representing NM_145519
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGAGAGATAGAAGGAACATACAGAGCTTTACCAACTTCAGGGACACGCTTGGGTGGCCAGACCGCCA
TTGGAGTGAGTACCCTGGAGCCAGAGCAGAGCCTGTCACCCAGGATGCAGGAGAAGCACATGCGCATCAG
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ACTCAAGTGTGGAAGCATTTGAATCTCATTGAATGTGACTACTTTGGTCTGGAGTTCAAGAATGTCCAGT
CCTACTGGATTTGGCTTGAACCTATGAAACCCATCATTAGGCAAGTACGAAAGCCAAAAAATGCGGTGCT
TCGCCTGGCAGTAAAATTTTTCCCGCCTGACCCTGGTCAGCTGCAAGAAGAGTACACAAGGTACCTGTTT
GCCTTGCAACTCAAGAGAGACCTCCTGGAGGAACGCCTGACCTGCACGGCCAACACTGCAGCCCTTCTCA
TATCCCACCTTCTGCAGTCGGAAATCGGAGATTATGATGAAACCCTGGATCGAGAACACCTCAAAGCCAA
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AGCCTGTGCCCTGAGCTTCAGGCCGCGCTGAGTACAGCTGAGCAGGGTGCATCCCCTGTGCTCAGCCCTG
TGCTCAGTGGCGCTGGTACAGCCAGGATGGACAACCAAGAAGAGCAGAAACACAAGCACATGCCAGAAGA
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CTCACCAGGGAGACCCCCAAGTTTCACTCAGGACTGCTCACATCACTCTCCAGGGCTGGAGGCAGAGATC
AGAGAAAAGGAGGCATGCCCTTCACCCTGCTTGGACAAGAACCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG211569 representing NM_145519
Red=Cloning site Green=Tags(s)

MGEIEGTYRALPTSGTRLGGQTAIGVSTLEPEQSLSPRMQEKHMRIRVKLLDSTVELFDIEPKCDGQVLL
TQVWKHLNLIECDYFGLEFKNVQSYWIWLEPMKPIIRQVRKPKNAVLRLAVKFFPPDPGQLQEEYTRYLF
ALQLKRDLLEERLTCTANTAALLISHLLQSEIGDYDETLDREHLKANEYLPNQEKSLEKILDFHQRHTGQ
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HYSPGHRDYADCHEALKAITEVTTELQQSLTRLENLQKLTELQRDLVGVENLIAPGREFIREGCLHKLTK
KGLQQRMFFLFSDMLLYTSKSVTGASHFRIRGFLPLRGMLVEESENEWSVPHCFTIYAAQKTIVVAASTR
LEKEKWMQDLNAAIQAAKTIGDSPPVLLGGPVYTRTPRSSDEVSLEESEDGRGNRGSLEGNSQHRANTTM
HVCWYRNTSVSRADHSAAVENQLSGYLLRKFKNSNGWQKLWVVFTNFCLFFYKTHQDDYPLASLPLLGYS
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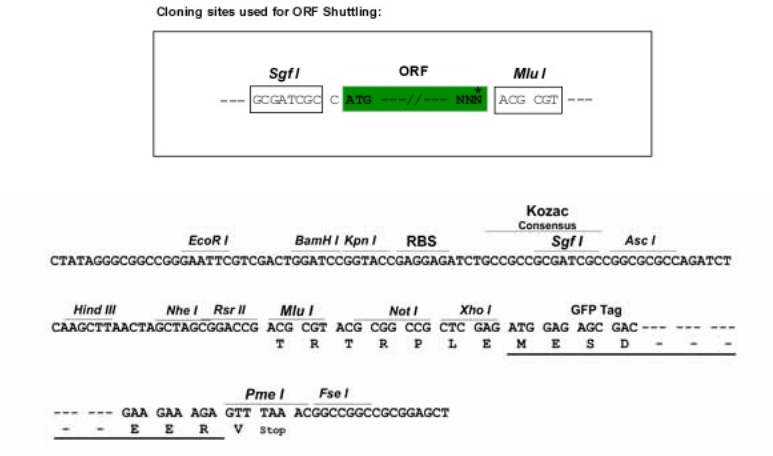
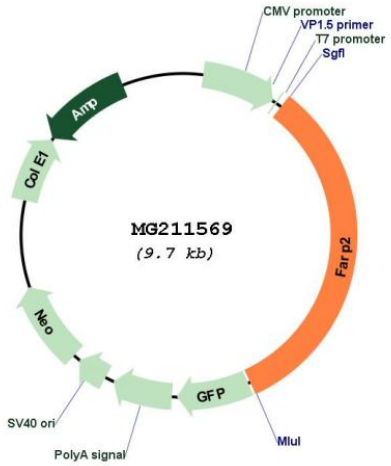
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_145519
ORF Size:	3195 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_145519.2, NP_663494.2
RefSeq Size:	3929 bp
RefSeq ORF:	3198 bp
Locus ID:	227377
UniProt ID:	Q91VS8
Cytogenetics:	1 D
Gene Summary:	Functions as guanine nucleotide exchange factor that activates RAC1. May have relatively low activity (PubMed:23375260 and PubMed:20702777). Plays a role in the response to class 3 semaphorins and remodeling of the actin cytoskeleton. Plays a role in TNFSF11-mediated osteoclast differentiation, especially in podosome rearrangement and reorganization of the actin cytoskeleton. Regulates the activation of ITGB3, integrin signaling and cell adhesion. [UniProtKB/Swiss-Prot Function]