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Product datasheet for MG224936

Zfp451 (NM_133817) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Zfp451 (NM_133817) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Zfp451
Synonyms:	4930515K21Rik; 4933435G09Rik; AI596398; COASTER; Kiaa0576-hp; mKIAA1702; Znf451
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG224936 representing NM_133817
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGAGACCCAGGGCCGGAGATAATAGAATCTGTCCCACCAGCTGGGCCCGAGGCATCAGAGTCTACCA
CGGATGAAAACGAAGATGACATTCAGTTTGTTAGTGAAGGACCGTTAAGACCCGTTTTGGAATACATTGA
TCTAGTCAGCAGTGATGATGAAGAGCCTAGTACCTCTCACAGTGATGAGAATTTTAAATGCAAAGACTAT
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ACAATGTGTTATAAGTGTGTGGTCTGTGGAAAGGTTTGTGAAGATTCGGGGGTCATGCGTTTACACATGA
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GGGGATGAAAGGATCTCCAGCAGAGGAGCTCAGGGCCACGGAGGATGTGGAATTAGAAGAAGCTATTAGA
AGAAGTCTTGAGGAGATG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG224936 representing NM_133817
Red=Cloning site Green=Tags(s)

MGDPGPEIIESVPPAGPEASESTTDENEDDIQFVSEGPLRPVLEYIDLVSSDDEEPSTSHSDENFKCKDY
IDHQKDKVALTLARLARHVEVEKQQKEEKNRAFREKIDFQHAHGLQELEFIQGHSETEAARQCVDQWLKM
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SFACAVCYEHFVTQQQYKDHLLSRTAAADGHSNSLLPQIIQCYACPQCFLLFSTKDECLKHMSTKNHFHQ
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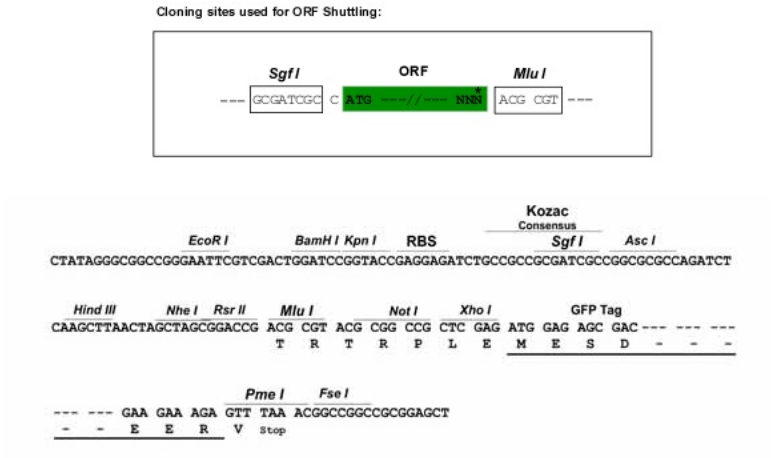
CQVHRKEKSEEEQQYVIKCGICTKAFQNTESAQQHFHRKHAALQKPTATPGGANRSSTCQLAASASHAEK
NLKQPSSQKHSDVEKGAEHDVRCQNIEEEVELPDVDYLRTMTHIVFVDFDNWSNFFGHLPGHLNQGTFIW
GFQGGNTNWKPPLSCKVYNYLSRIGCFFLHPRCSKRKDAADFAICMHAGRLDEQLPKQIPFTILSGDQGF
LELENQFKKTQRPAHILNPHHLEGDMMCALLNSISDTTKECDSDDSSGMKGSPAEELRATEDVELEEAIR
RSLEEM

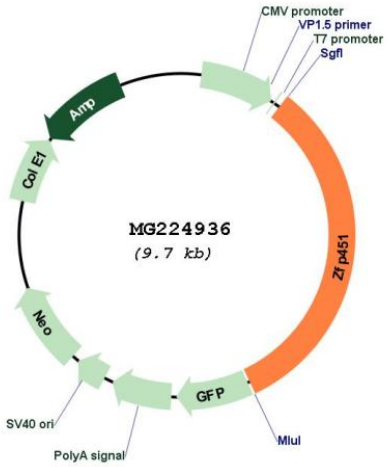
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_133817
ORF Size:	3168 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_133817.3, NP_598578.1
RefSeq Size:	3650 bp
RefSeq ORF:	3171 bp
Locus ID:	98403
UniProt ID:	Q8C0P7
Cytogenetics:	1 12.81 cM
Gene Summary:	E3 SUMO-protein ligase; has a preference for SUMO2 and SUMO3 and facilitates UBE2I/UBC9-mediated sumoylation of target proteins. Plays a role in protein SUMO2 modification in response to stress caused by DNA damage and by proteasome inhibitors (in vitro). Required for MCM4 sumoylation. Has no activity with SUMO1 (PubMed:26524493). Preferentially transfers an additional SUMO2 chain onto the SUMO2 consensus site 'Lys-11'. Negatively regulates transcriptional activation mediated by the SMAD4 complex in response to TGF-beta signaling. Inhibits EP300-mediated acetylation of histone H3 at 'Lys-9'. Plays a role in regulating the transcription of AR targets (By similarity).[UniProtKB/Swiss-Prot Function]