

Product datasheet for **RG228168**

Endonuclease V (ENDO V) (NM_001164637) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Endonuclease V (ENDO V) (NM_001164637) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: ENDO V
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG228168 representing NM_001164637
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGATCGCC

ATGGCCCTGGAGGCGCGGGAGGGCCGCCGGAGGAAACGCTGTCCTGTGGAAACGGGAGCAAGCTCGGC
TGAAGGCCACGTCGTAGACCGGGACACCGAGGCGTGGCAGCGAGACCCCGCCTTCTCGGGTCTGCAGAG
GGTCGGGGGCGTTGACGTGTCTTCGTGAAAGGGGACAGTGTCCGCGCTTGTGCTTCCCTGGTGGTGCTC
AGCTTCCCTGAGCTCGAGGTCTTCTTGTGGATGGAAACGGGGTACTCCACCACCGAGGCTTTGGGGTGG
CCTGCCACCTTGGCGTCCTTACAGACTGCCGTGTGTTGGGGTGGCCAAGAACTTCTGCAGGTGGATGG
GCTGGAGAACAACGCCCTGCACAAGGAGAAGATCCGACTCCTGCAGACTCGAGGAGACTCATTCCCTCTG
CTGGGAGACTCTGGGACTGTCCTGGGAATGGCCCTGAGGAGCCACGACCGCAGCACCAGGCCCTTACA
TCTCCGTGGGCCACAGGATGAGCCTGGAGGCGCTGTGCGCCTGACTTGTGCTGCTGCAGGTTCCGGAT
CCCAGAGCCCGTGCAGGCTGACATCTGCTCCCGAGAGCACATCCGCAAGTCGCTGGGACTCCCCGGG
CCACCCACACCGAGGAGCCGAAGGCGCAGAGGCCAGTGGCATGCCCAAAGGAGACTCCGGAGAGTCTC
CAGCACTTTGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG228168 representing NM_001164637
Red=Cloning site Green=Tags(s)

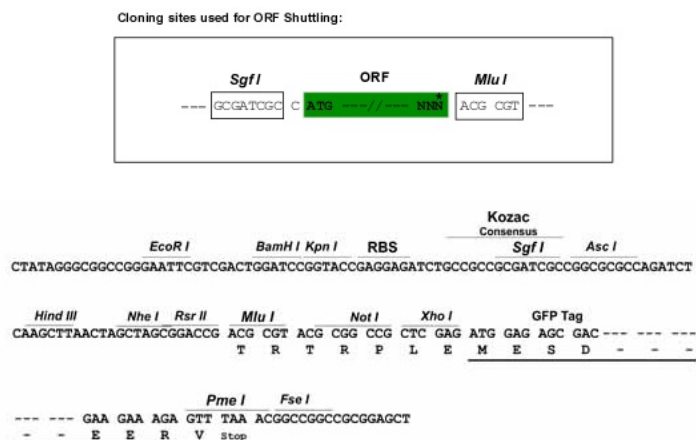
MALEAAGPPEETLSLWKREARLKAHVVDRTTEAWQRDPAFSGLQRVGGVDVSVFKGDSVRACASLVVL
SFPELEVLLVDGNGVLHHRGFGVACHLGVLTDLPCVGVAKLLQVDGLENNALHKEKIRLLQTRGDSFPL
LGDSGTVLGMALRSHDRSTRPLYSVGHMSLEAAVRLTCCCFRIPEPVQADICSREHIRKSLGLPG
PPTPRSPKAQRPVACPKGDSGESSALC

TRTRPLE - GFP Tag - V

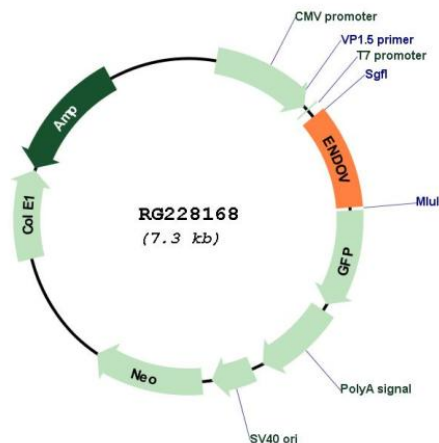


Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001164637

ORF Size: 711 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_001164637.3
RefSeq Size:	2705 bp
RefSeq ORF:	714 bp
Locus ID:	284131
UniProt ID:	Q8N8Q3
Cytogenetics:	17q25.3
Protein Families:	Druggable Genome
Gene Summary:	Endoribonuclease that specifically cleaves inosine-containing RNAs: cleaves RNA at the second phosphodiester bond 3' to inosine. Has strong preference for single-stranded RNAs (ssRNAs) toward double-stranded RNAs (dsRNAs). Cleaves mRNAs and tRNAs containing inosine. Also able to cleave structure-specific dsRNA substrates containing the specific sites 5'-IIUI-3' and 5'-UIUU-3'. Inosine is present in a number of RNAs following editing; the function of inosine-specific endoribonuclease is still unclear: it could either play a regulatory role in edited RNAs, or be involved in antiviral response by removing the hyperedited long viral dsRNA genome that has undergone A-to-I editing. Binds branched DNA structures.[UniProtKB/Swiss-Prot Function]