

## Product datasheet for RC228168

### 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:	Myc-DDK
Symbol:	Endonuclease V
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC228168 representing NM_001164637 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCCTGGAGGCGCGGGAGGGCCGCCGGAGGAAACGCTGTCCTGTGGAAACGGGAGCAAGCTCGGC  
TGAAGGCCACGTCGTAGACCGGGACACCGAGGCGTGGCAGCGAGACCCCGCCTTCTCGGGTCTGCAGAG  
GGTCGGGGGCGTTGACGTGTCTTCGTGAAAGGGGACAGTGTCCGCGCTTGTGCTTCCCTGGTGGTGCTC  
AGCTTCCCTGAGCTCGAGGTCTTCTTGTGGATGGAAACGGGGTACTCCACCACCGAGGCTTTGGGGTGG  
CCTGCCACCTTGGCGTCTTACAGACTGCCGTGTGTTGGGGTGGCCAAGAACTTCTGCAGGTGGATGG  
GCTGGAGAAACAACGCCCTGCACAAGGAGAAGATCCGACTCCTGCAGACTCGAGGAGACTCATTCCCTCTG  
CTGGGAGACTCTGGGACTGTCCTGGGAATGGCCCTGAGGAGCCACGACCGCAGCACCAGGCCCTTACA  
TCTCCGTGGGCCACAGGATGAGCCTGGAGGCGCTGTGCGCTGACTTGTGCTGCTGCAGGTTCCGGAT  
CCCAGAGCCCGTGCAGGCTGACATCTGCTCCCGAGAGCACATCCGCAAGTCGCTGGGACTCCCCGGG  
CCACCCACACCGAGGAGCCGAAGGCGCAGAGGCCAGTGGCATGCCCAAAGGAGACTCCGGAGAGTCTC  
CAGCACTTTGT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC228168 representing NM\_001164637  
 Red=Cloning site Green=Tags(s)

MALEAAGPPEETLSLWKREARLKAHVVDKRDTEAWQRDPAFSGLQRVGGVDVSVFKGDSVRACASLVVL  
 SFPELEVLLVDGNGVLHHRGFVACHLGVLTDLPCVGVAKLLQVDLENNALHKEKIRLLQTRGDSFPL  
 LGDSGTVLGMALRSHDRSTRPLYISVGHRSLEAAVRLTCCCRFRIPEPVRQADICSRHIRKSLGLPG  
 PPTPRSPKAQRPVACPKGDSGESSALC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1260\\_a07.zip](https://cdn.origene.com/chromatograms/ja1260_a07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**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:**

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 ORF:** 714 bp

**Locus ID:** 284131

**UniProt ID:** [Q8N8Q3](#)

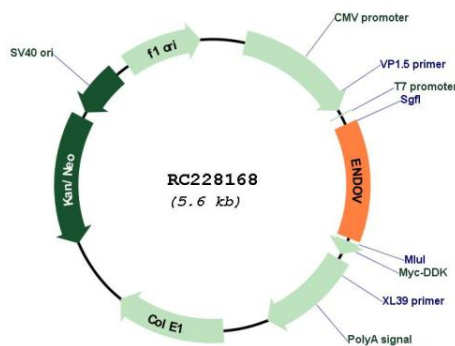
**Cytogenetics:** 17q25.3

**Protein Families:** Druggable Genome

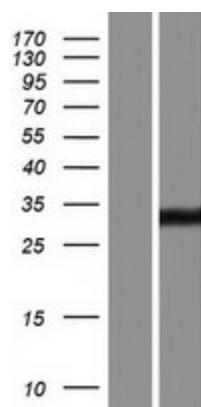
**MW:** 25.4 kDa

**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]

### Product images:



Circular map for RC228168



Western blot validation of overexpression lysate (Cat# [LY431196]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC228168 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).