

# **Product datasheet for RC228788**

### OriGene Technologies, Inc.

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## Endonuclease V (ENDOV) (NM\_001164638) Human Tagged ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Endonuclease V (ENDOV) (NM\_001164638) 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 >RC228788 representing NM\_001164638
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGCCCTGGAGGCGGCGGGAGGCCCCGGAGGAAACGCTGTCACTGTGGAAACGGGAGCAAGCTCGGC
TGAAGGCCCACGTCGTAGACCGGGACACCGAGGCGTGGCAGCAGGCCCGCCTTCTCGGGTCTGCAGAG
GGTCGGGGGCGTTGACGTGTCCTTCGTGAAAGGGGACAGTGTCCGCGCCTTGTGCTTCCCTGGTGTGCTC
AGCTTCCCTGAGCTCGAGGTCCTTCTTGTGGATGGAAACGGGGTACTCCACCACCGAGGCTTTGGGGTGG
CCTGCCACCTTGGCGTCCTTACAGACCTGCCGTGTGTTGGGGTGGCCAAGAAACTTCTGCAGGTGGATGG
GCTGGAGAACAACGCCCTGCACAAGGAGAAGATCCGACTCCTGCAGACTCGAGGAGACTCATTCCCTCTG
CTGGGAGACTCTGGGACTGCCTGAGAATGGCCCTGAGGAGCCCACGACCCAGCACCAGGCCCCTCTACA
TCTCCGTGGGCCACAGGATGACCTGGAGGCCCTGTGCGCCTGACTTGCTGCTGCTGCAGGTTCCCGGAT
CCCAGAGCCCGTGCGCCAGGCTGACATCTGCTCCCGAGAGCACATCCGCAAGTCCCTGGGACTCCCCGGG
CCACCCACACCGAGGAGCCCCAAGGCCCAGAGGCCCCAAAGGAGACTCCCCAGGA
GCAGCGCGCAGGCCCCCACAGGACCACAGCCCCAAGGCCCCCAAGGCCCCCAAGGACCCCCAGGACCCCAAGGACCCCCACGGACCCCCACAGGACCCCCACAGGACCCCCAAGGCCCCAAGGCCCCCAAGGACCCCCAAGGACCCCCAAGGACCCCCAAGGCCCCAAGGCCCCAAGGACCCCCAAGGCCCCAAGGCCCCCAAGGACCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGGCCCCCAAGGCCCCCAAGGCCCCAAGCCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCCCAAGCCCCAAGCCCCCAAGCCCCCAAGCCCCCAAGCCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA





Protein Sequence: >RC228788 representing NM\_001164638

Red=Cloning site Green=Tags(s)

MALEAAGGPPEETLSLWKREQARLKAHVVDRDTEAWQRDPAFSGLQRVGGVDVSFVKGDSVRACASLVVL SFPELEVLLVDGNGVLHHRGFGVACHLGVLTDLPCVGVAKKLLQVDGLENNALHKEKIRLLQTRGDSFPL LGDSGTVLGMALRSHDRSTRPLYISVGHRMSLEAAVRLTCCCCRFRIPEPVRQADICSREHIRKSLGLPG PPTPRSPKAQRPVACPKGDSGESSGEGQPPQDHSPGPRTAPRPGSQEQAGKDWQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** 

Sgfl-Mlul

**Cloning Scheme:** 

Cloning sites used for ORF Shuttling:

Sgf1 ORF Mlu I
--- GCGATCGC C ATG ---/-- NASI ACG CGT ---

CTATAGGGGGGGCGG	_EcoRI GAATTOGTO	BamH GACTGGATO	I Kpn I	RBS GAGGA	- GATCTGC	Cons	ozac sensus Sgf	7	С	TG -		
ORF	NNN	Mlu I ACG CGT T R	ACG CGC T R		Xhol CTC GAG L E	CAG Q	AAA K	Myc CTC L	.Tag ATC	TCA S	GAA E	GAG E
GAT CTG GCA GCF	A AAT GAT		SAT TAC D Y			GAC G		AAG K	GTT	me I TAA stop	ACGG	se I cagaa

<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM 001164638

ORF Size: 792 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:** <u>NM 001164638.2</u>

 RefSeq ORF:
 795 bp

 Locus ID:
 284131

 UniProt ID:
 Q8N8Q3

 Cytogenetics:
 17q25.3

**Protein Families:** Druggable Genome

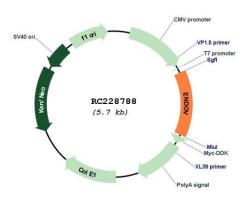
MW: 28.3 kDa

**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 RC228788