

Product datasheet for RC215740

Endonuclease V (ENDO V) (NM_173627) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Endonuclease V (ENDO V) (NM_173627) 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:	>RC215740 representing NM_173627 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCTGGAGGCGCGGGAGGGCCCGCGAGGAAACGCTGTCCTGTGGAAACGGGAGCAAGCTCGGC
TGAAGGCCACGTCGTAGACCGGGACACCGAGGCGTGGCAGCGAGACCCCGCCTTCTCGGGTCTGCAGAG
GGTCGGGGGCGTTGACGTGTCTTCGTGAAAGGGGACAGTGTCCGCGCTTGTGCTTCCCTGGTGGTGCTC
AGCTTCCCTGAGCTCGAGGTGGTGTATGAGGAGAGCCGCATGGTCAGCCTCACAGCCCCCTACGTGTCGG
GCTTCCCTGGCCTCCGAGAGGTGCCCTTCTTGTGGAGCTGGTGCAGCAGCTGCGGAGAAAGGAGCCGGG
CCTCATGCCCCAGGTCTTCTTGTGGATGGAAACGGGGTACTCCACCACCGAGGCTTTGGGTGGCCTGC
CACCTTGGCGTCTTACAGACCTGCCGTGTGTTGGGTGGCCAAGAACTTCTGCAGGTGGATGGGCTGG
AGAACAACGCCCTGCACAAGGAGAAGATCCGACTCCTGCAGACTCGAGGAGACTCATTCCCTCTGCTGGG
AGACTCTGGGACTGTCTGGAAATGGCCCTGAGGAGCCACGACCGCAGCACCAGGCCCTCTACATCTCC
GTGGGCCACAGGATGAGCCTGGAGGCCGCTGTGCGCCTGACTTGTGCTGCTGCAGGTTCCGGATCCAG
AGCCCGTGCAGGCTGACATCTGCTCCCGAGAGCACATCCGCAAGTCGCTGGGACTCCCCGGGCCACC
CACACCGAGGAGCCCGAAGGCGCAGAGGCCAGTGGCATGCCCCAAGGAGACTCCGGAGAGTCTCAGCA
CTTTGT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC215740 representing NM_173627
Red=Cloning site Green=Tags(s)

MALEAAGGPPEETLSLWKREARLKAHVVD RDTEAWQRDPAFSGLQRVGGVDVSVFKGDSVRACASLVVL
 SFPELEVYVEESRMVSLTAPYVSGFLAFREVPFLLELVQQLREKEPGLMPQVLLVDGNGVLHHRFGVAC
 HLGVLTDLPCVGVAKLLQVDGLENNALHKEKIRLLQTRGDSFPLLGDSGTVLGMALRSHDRSTRPLYIS
 VGHRMSLEAAVRLTCCCRFRIPVVRQADICSRHIRKSLGLPGPPTPRSPKAQRPVACPKGDSGESSA
 LC

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8028_g01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_173627

ORF Size: 846 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_173627.5](#)

RefSeq Size: 2858 bp

RefSeq ORF: 849 bp

Locus ID: 284131

UniProt ID: [Q8N8Q3](#)

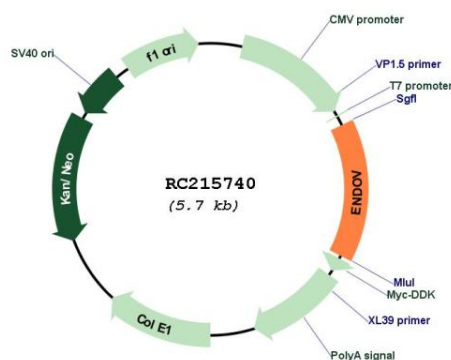
Cytogenetics: 17q25.3

Protein Families: Druggable Genome

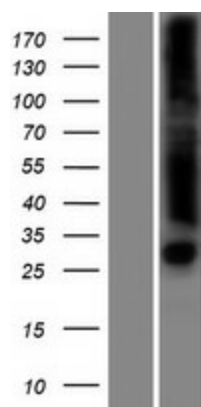
MW: 30.6 kDa

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]

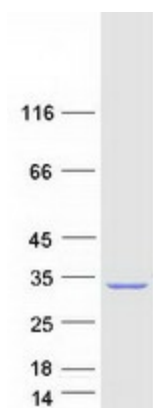
Product images:



Circular map for RC215740



Western blot validation of overexpression lysate (Cat# [LY406516]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC215740 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ENDOV protein (Cat# [TP315740]). The protein was produced from HEK293T cells transfected with ENDOV cDNA clone (Cat# RC215740) using MegaTran 2.0 (Cat# [TT210002]).