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Product datasheet for RC203052

DCPS (NM_014026) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DCPS (NM_014026) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DCPS
Synonyms:	ARS; DCS1; HINT-5; HINT5; HSL1; HSPC015
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC203052 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGACGCAGCTCCTCAACTAGGCAAGAGGAAGCGCGAATTGGACGTGGAGGAGGCCCACGCCGCCA
GCACAGAGGAAAAGGAGGCAGGAGTTGGAAATGGTACCTGTGCTCCTGTCCGCTTACCGTTCTCCGGCTT
CAGACTGCAGAAGGTGCTGAGGGAGTCTGCGCGGGACAAAATCATTTTCCTACACGGGAAGGTGAATGAG
GCCTCTGAGGATGGGGATGGAGAGGATGCCGTTGTGATCCTGGAGAAGACGCCATTTCAGGTGGAACAGG
TGGCTCAGCTCCTGACGGGCAGCCCTGAGCTCCAATTGCAGTTCTCCAATGATATCTACAGCACCTATCA
CTTGTTCCCTCCAAGACAACTGAATGATGTAAAGACGACCGTGGTTTACCCTGCCACAGAGAAACACCTG
CAGAAGTACCTGCGCCAGGACCTCCGCCTGATCCGAGAGACGGGAGATGACTACAGGAACATTACTTTAC
CCCACCTGGAGTCCCAGAGCCTCAGCATCCAGTGGGTGTATAACATTCTCGACAAGAAGGCTGAAGCGGA
CCGGATTGTTTTCGAGAACCCAGATCCCTCTGATGGTTTTGTCCTCATCCCTGACCTCAAGTGGAACCAA
CAGCAGCTCGATGACTTGTACTTGATCGCCATCTGCCATCGCCGGGGCATCAGATCCCTACGCGACCTTA
CTCCGGAGCACTTGCCGCTGCTCAGGAACATCCTCCACCAGGGGCAGGAGGCCATCCTGCAGCGCTACCG
GATGAAGGGAGACCATCTGCGAGTATACCTGCACTACCTGCCCTCCTACTACCACCTGCATGTGCACTTC
ACCGCCCTGGGCTTCGAGGCCCCCGGCTCAGGCGTGGAGCGGGCCCACCTGCTGGCTGAGGTGATCGAGA
ACTTGGAGTGTGACCCTAGGCACTACCAGCAGCGCACGCTCACCTTCGCCCTCAGGGCTGACGACCCCCT
GCTCAAGCTCTTGCAGGAGGCTCAGCAAAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC203052 protein sequence
Red=Cloning site Green=Tags(s)

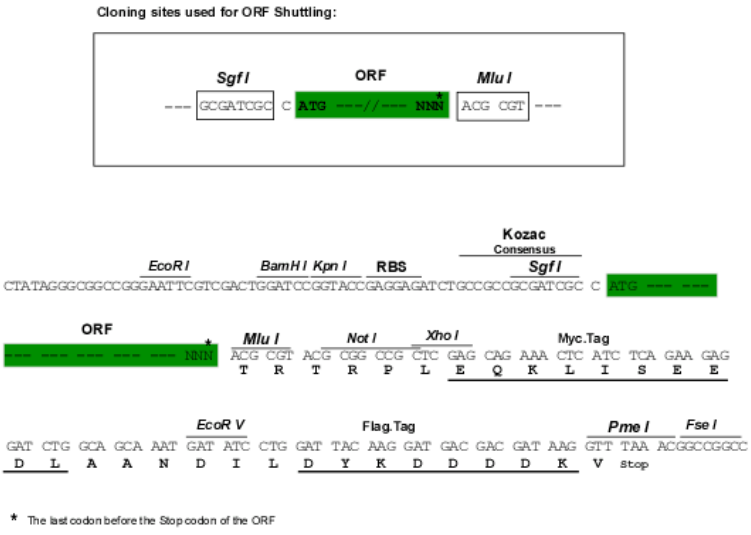
MADAAPQLGKRKRELDVEEAHAASTEEKEAGVGNGTCAPVRLPFSGFRLQKVLRESARDKIIFLHGKVNE
ASEDGDGEDAVVILEKTPFQVEQVAQLLTGSPELQLQFSNDIYSTYHLFPPRQLNDVKTTVVYPATEKHL
QKYLRQDLRLIRETGDDYRNITLPHLESQSLSIQWVYNILDKKAEADRIVFENPDPSDGFVLIPDLKWNQ
QQLDDLYLIAICHRRGIRSLRDLTPEHLPLLRNILHQGQEAILQRYRMKGDHLRVYLHYLPSYYHLHVHF
TALGFEAPGSGVERAHLLAEVIENLECDPRHYQQRTLTFALRADDPLLKLLQEAQQS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6435_e12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014026

ORF Size: 1011 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_014026.6

RefSeq Size: 1508 bp

RefSeq ORF: 1014 bp

Locus ID: 28960

UniProt ID: Q96C86

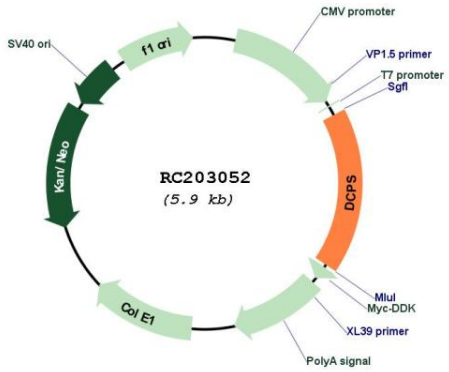
Cytogenetics: 11q24.2

Protein Pathways: RNA degradation

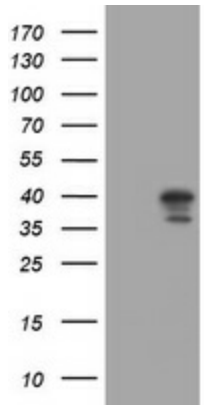
MW: 38.7 kDa

Gene Summary: This gene encodes a member of the histidine triad family of pyrophosphatases that removes short mRNA fragments containing the 5′ mRNA cap structure, which appear in the 3′ → 5′ mRNA decay pathway, following deadenylation and exosome-mediated turnover. This enzyme hydrolyzes the triphosphate linkage of the cap structure (7-methylguanosine nucleoside triphosphate) to yield 7-methylguanosine monophosphate and nucleoside diphosphate. It protects the cell from the potentially toxic accumulation of these short, capped mRNA fragments, and regulates the activity of other cap-binding proteins, which are inhibited by their accumulation. It also acts as a transcript-specific modulator of pre-mRNA splicing and microRNA turnover. [provided by RefSeq, Apr 2017]

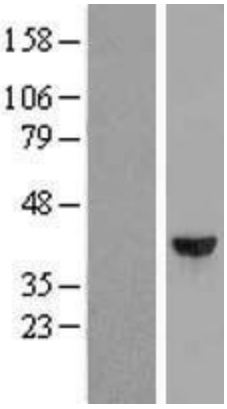
Product images:



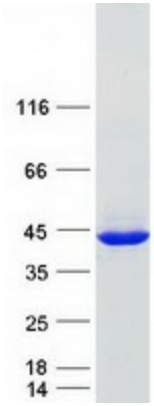
Circular map for RC203052



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DCPS (Cat# RC203052, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DCPS(Cat# [TA505420]). Positive lysates [LY415527] (100ug) and [LC415527] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY415527]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203052 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DCPS protein (Cat# [TP303052]). The protein was produced from HEK293T cells transfected with DCPS cDNA clone (Cat# RC203052) using MegaTran 2.0 (Cat# [TT210002]).