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Product datasheet for RC204235

DHPS (NM_001930) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DHPS (NM_001930) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DHPS
Synonyms:	DHS; DS; MIG13; NEDSSWI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

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>RC204235 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAAGGTTCCCTGGAACGGGAGGCGCCAGCGGGGGCGCTGGCCGCCGTGCTAAAGCACAGCTCGACGT
TGCCGCCCGAAAGCACCCAGGTCCGGGGCTACGACTTCAACCGCGGTGTGAATTACCGCGCACTGCTGGA
GGCCTTCGGCACCACCGGCTTCCAAGCAACCAACTTCGGGCGCGCTGTACAGCAAGTCAATGCCATGATC
GAGAAGAAGCTGGAACCACTGTCACAGGATGAAGACCAGCACGCGGACCTGACCCAGAGCCGCCGCCCAC
TTACCAGCTGCACCATTTTCCTGGGATATACATCCAACCTCATCAGTTCAGGCATCCGTGAGACCATTCG
CTACCTTGTGCAGCACAACATGGTGGACGTATTGGTGACCACAGCTGGCGGCGTGGAGGAAGACCTCATC
AAGTGCCTGGCGCCCACATACTTGGGCGAGTTTAGCCTCAGGGGGAAGGAGCTCCGGGAGAACGGGATCA
ATAGGATCGGAAACCTGCTGGTGCCCAATGAGAATTACTGCAAGTTTGAGGACTGGCTGATGCCCATTCT
GGACCAGATGGTGATGGAGCAGAACACAGAGGGTGTAAAGTGGACGCCTTCTAAGATGATCGCCCGGCTG
GGCAAGGAGATCAACAACCCAGAGTCCGTGTATTACTGGGCCCAGAAGAACCACATCCCTGTGTTTAGTC
CCGCACTTACAGACGGCTCGCTGGGCGACATGATCTTCTTCCATTCCTACAAGAACCCGGGCCTGGTCCT
GGACATCGTTGAGGACCTGAGGCTCATCAACACACAGGCCATCTTTGCCAAGTGCACTGGGATGATCATT
CTGGGCGGGGGCGTGGTCAAGCACCACATTGCCAATGCCAACCTCATGCGGAACGGGGCCGACTACGCTG
TTTACATCAACACAGCCCAGGAGTTTGATGGCTCTGACTCAGGTGCCCGACCAGACGAGGCTGTCTCCTG
GGGCAAGATCCGGGTGGATGCACAGCCCGTCAAGGTCTATGCTGACGCCTCCCTGGTCTTCCCCCTGCTT
GTGGCTGAAACCTTTGCCCAGAAGATGGATGCCTTCATGCATGAGAAGAATGAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA
```

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Protein Sequence:

```
>RC204235 protein sequence
Red=Cloning site Green=Tags(s)

MEGSLEREAPAGALAAVLKHSSTLPPESTQVRGYDFNRGVNYRALLEAFGTTGFQATNFGRAVQQVNAMI
EKKLEPLSQDEDQHADLTQSRRPLTSCTIFLGYTSNLISSGIRETIRYLVQHNMVDVLVTTAGGVEEDLI
KCLAPTYLGEFSLRGKELRENGINRIGNLLVPNENYCKFEDWLMPILDQMVMEQNTEGVKWTPSKMIARL
GKEINNPESVYYWAQKNHIPVFSPALTDGSLGDMIFFHSYKNPGLVLDIVEDLRLINTQAIFAKCTGMII
LGGGVVKHHIANANLMRNGADYAVYINTAQEFDGSDSGARPDEAVSWGKIRVDAQPVKVYADASLVFPLL
VAETFAQKMDAFMHEKNED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV
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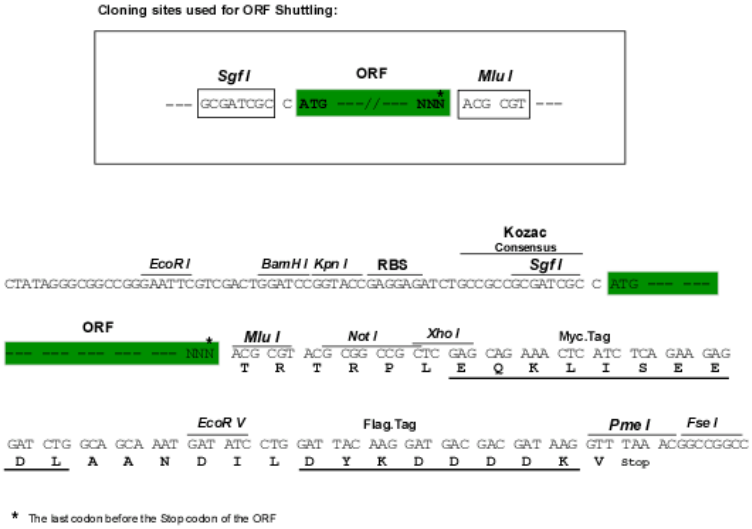
Chromatograms: https://cdn.origene.com/chromatograms/mk6058_h07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001930

ORF Size: 1107 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).

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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_001930.4

RefSeq Size: 1361 bp

RefSeq ORF: 1110 bp

Locus ID: 1725

UniProt ID: P49366

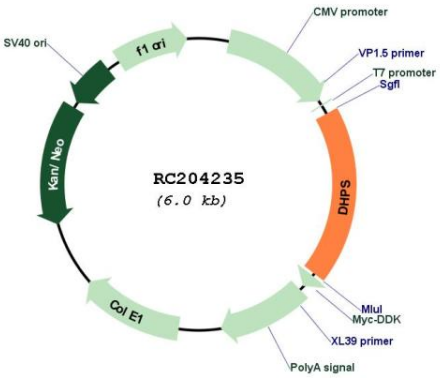
Cytogenetics: 19p13.13

Domains: DS

MW: 41 kDa

Gene Summary: This gene encodes a protein that is required for the formation of hypusine, a unique amino acid formed by the posttranslational modification of only one protein, eukaryotic translation initiation factor 5A. The encoded protein catalyzes the first step in hypusine formation by transferring the butylamine moiety of spermidine to a specific lysine residue of the eukaryotic translation initiation factor 5A precursor, forming an intermediate deoxyhypusine residue. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, May 2011]

Product images:



Circular map for RC204235

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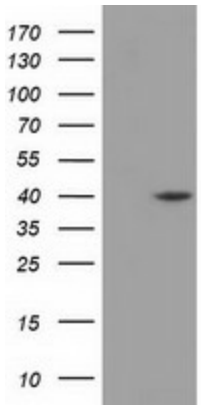
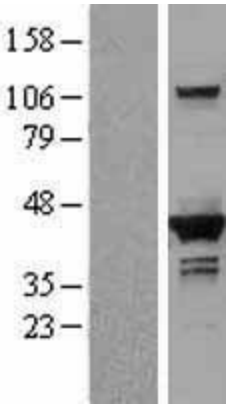
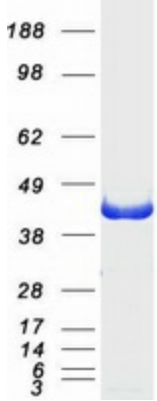


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY DHPS (Cat# RC204235, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-DHPS(Cat# [TA501393]). Positive lysates [LY400714] (100ug) and [LC400714] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY400714]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204235 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DHPS protein (Cat# [TP304235]). The protein was produced from HEK293T cells transfected with DHPS cDNA clone (Cat# RC204235) using MegaTran 2.0 (Cat# [TT210002]).

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