

Product datasheet for **RC222934**

DHPS (NM_013407) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DHPS (NM_013407) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DHPS
Synonyms:	DHS; MIG13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC222934 representing NM_013407 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGTTCCCTGGAACGGGAGGCGCCAGCGGGGGCGCTGGCCCGCTGCTAAAGCACAGCTCGACGT
TGCCGCCCGAAAGCACCCAGGTCCGGGGCTACGACTTCAACCGCGGTGTGAATTACCGCGCACTGCTGGA
GGCCTTCGGCACCACCGGCTTCCAAGCAACCAACTTCGGGCGCGCTGTACAGCAAGTCAATGCCATGATC
GAGAAGAAGCTGGAACCACTGTACAGGATGAAGACCAGCACGGGACCTGACCCAGAGCCGCCGCCAC
TTACCAGCTGCACCATTTTCTGGGATATACATCCAACCTCATCAGTTCAGGCATCCGTGAGACCATTTCG
CTACCTTGTGCAGCACAACATGGTGGACGTATTGGTGACCACAGCTGGCGCGTGGAGGAAGACCTCATC
AAGTGCCTGGCGCCACATACTTGGGCGAGTTTAGCCTCAGGGGAAGGAGCTCCGGGAGAACGGGATCA
ATAGGATCGAAAACCTGCTGGTGCCCAATGAGAATTACTGCAAGTTTGGAGACTGGCTGATGCCATTCT
GGACCAGATGGTATGGAGCAGAACACAGAGGGTGTAAAGTGGACGCCTTCTAAGATGATCGCCCGGCTG
GGCAAGGAGATCAACAACCCAGAGTCCGTGTATTACTGGGCCAGAAGAACCACATCCCTGTGTTTATGC
CCGCACTTACAGACGGCTCGCTGGGCGACATGATCTTCTCCATTCTACAAGAACCAGGCGCTGGTCT
GGACATCGTTGAGGGTGGCCGACCAGACGAGGCTGTCTCTGGGCAAGATCCGGGTGGATGCACAGCCC
GTCAAGTCTATGCTGACGCCTCCCTGGTCTTCCCCTGCTTGTGGCTGAAACCTTTGCCAGAAGATGG
ATGCCTTCATGCATGAGAAGAACGAGGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC222934 representing NM_013407
Red=Cloning site Green=Tags(s)

MEGLSREAPAGALAAVLKHSSTLPPESTQVRGYDFNRGVNRYRALLEAFGTTGFQATNFGRAVQQVNAMI
 EKKLEPLSQDEDQHADLTQSRRLTSCITFLGYTSNLISSGIRETIRYLQVHNMVDVLVTTAGGVEEDLI
 KCLAPTYLGEFSLRGKELRENGINRIGNLLVPENYCKFEDWLMPIILDQMVMQNTGKWTSPKMIARL
 GKEINNPEVSYWYAQKNHIPPVFPALTDGSLGDMIFFHSYKNPGLVLDIVEGARPDEAVSWGKIRVDAQP
 VKYYADASLVFPPLLVAETFAQKMDAFMHEKNED

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1768_g11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_013407

ORF Size: 939 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_013407.1](#), [NP_037539.1](#)

RefSeq Size: 1183 bp

RefSeq ORF: 941 bp

Locus ID: 1725

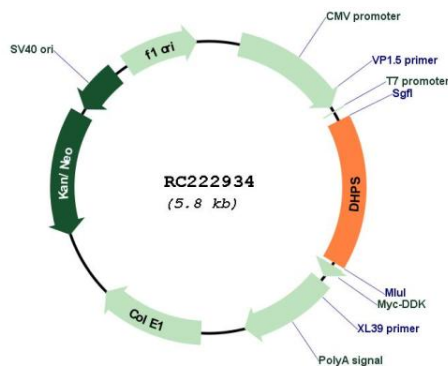
Cytogenetics: 19p13.13

Domains: DS

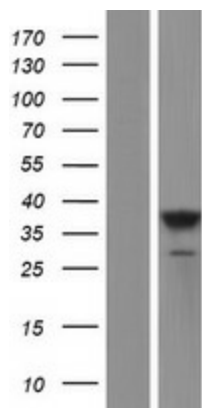
MW: 34.8 kDa

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]

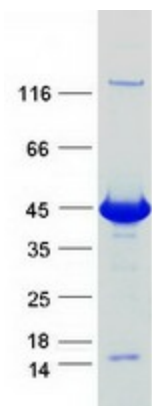
Product images:



Circular map for RC222934



Western blot validation of overexpression lysate (Cat# [LY415606]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC222934 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DHPS protein (Cat# [TP322934]). The protein was produced from HEK293T cells transfected with DHPS cDNA clone (Cat# RC222934) using MegaTran 2.0 (Cat# [TT210002]).