

## Product datasheet for **RC221955**

### OVCA1 (DPH1) (NM\_001383) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OVCA1 (DPH1) (NM_001383) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	OVCA1
Synonyms:	DEDSSH; DPH2L; DPH2L1; OVCA1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC221955 representing NM\_001383  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGCGCAGGCAGGTGATGGCGGCGCTGGTCGATCCGGGGCAGCGGAGCAGGGCGGCCGAGACGGCCCTG  
 GCAGAGGTCGGGCCCTCGGGCCGCGTGGCCAATCAGATCCCCCTGAGATCCTGAAGAACCCTCAGCT  
 GCAGGCAGCAATCCGGGCTCTGCCTTCCAATACTAACTTTGAGATCCCCAAGACCATCTGGAGGATCCAA  
 CAAGCCCAGGCCAAGAAGGTGGCCTTGCAAATGCCGGAAGGCCTCCTCCTTTGCTGTACCATTTGTGG  
 ATATCTTGAAAGGTTACGGAGGCCGAAGTGTGGTGTGGGTGACGTGACCTACGGGGCTTGTGTGT  
 GGATGACTTACAGCGAGGGCCCTGGGAGCTGACTTCTGGTGCCTACGGCCACAGTTGCCTGATTCCC  
 ATGGACACCTCGGCCAAGACTTCCGGGTGCTGTACGTCTTTGTGGACATCCGGATAGACACTACACACC  
 TCCTGGACTCTCCGCCTCACCTTTCCCCAGCCACTGCCCTTGCCTGGTCAGCACCATTAGTTTGT  
 GTCGACCTTGCAGGCAGCCGCCAGGAGCTGAAAGCCGAGTATCGTGTGAGTGTCCACAGTGCAAGCCC  
 CTGTCCCCTGGAGAGATCCTGGGCTGCACATCCCCCGACTGTCCAAAGAGGTGGAGGCCGTTGTGTATC  
 TTGGAGATGGCCGCTTCCATCTGGAGTCTGTATGATTGCCAACCCCAATGTCCCCTTACCGGTATGA  
 CCCATATAGCAAAGTCTATCCAGAGAACAATGACCACCAGCGCATGCAGGCTGCTCGCCAAGAAGCC  
 ATAGCCACTGCCCGCTCAGCTAAGTCTGGGGCCTTATTCTGGGCACTTTGGGCCGCCAGGGCAGTCCTA  
 AGATCTTGAGCACCTGGAATCTCGACTCCGAGCCTTGGGCCCTTCTTTGTGAGGCTGTGCTCTCTGA  
 GATCTTCCCAGCAAGCTTAGCCTACTTCTGAGGTGGATGTGTGGTGCAGGTGGCATGTCACAGTCTC  
 TCCATTGCTGGGCACAGCCTTCCCCAAGCCGCTGCTGACACCCTATGAGGCGGCCGCTGGCTCTGAGGG  
 ACATTTCTGGCAGCAGCCCTACCCGATGGACTTCTACGCTGGCAGCTCCTTGGGGCCCTGGACGGTGAA  
 CCACGGCCAGGACCGCCGTCGCCACGCCCGGGCCGCGCGGGGGAAGGTGCAGGAGGGGTCCGCG  
 CGTCCCCCTTCGGCCGTGGCTTTCGAGGACTGCAGCTGCAGGGACGAGAAGGTGGCGCCGCTGGCTCCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC221955 representing NM\_001383  
 Red=Cloning site Green=Tags(s)

MRRQVMAALVVSAAEQGGRDGPGRGRAPRGRVANQIPPEILKNPQLQAAIRVLPNSYNFEIPKTIWRIQ  
 QAAKVALQMPGEGLLFACTIVDILERFTEAEVMVMGDVYGAACVDDFTARALGADFLVHYGHSCLIP  
 MDTSAQDFRVLVYFVDIRIDTTHLLDSLRLTFPPATALALVSTIQFVSTLQAAAQELKAEYRVSVQCKP  
 LSPGEILGCTSPRLSKEVEAVVYLGDRFHLESVMIANPNVPAYRYDPYSKVLREHYDHQRMQAARQEA  
 IATARSAKSWGLILGTLGRQSPKILEHLESRLRALGLSFVRLLLSEIFPSKLSLLPEVDVWVQVACPRL  
 SIDWGTAFPKPLLTPEAAVALRDISWQQPYPMDFYAGSSLGPWTVNHGQDRRPHAPGRPARGKVEGSA  
 RPPSAVACEDCSRDEKVAPLAP

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8039\\_d11.zip](https://cdn.origene.com/chromatograms/mk8039_d11.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001383

**ORF Size:** 1329 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\\_001383.4](#)

**RefSeq Size:** 2200 bp

**RefSeq ORF:** 1317 bp

**Locus ID:** 1801

**UniProt ID:** [Q9BZG8](#)

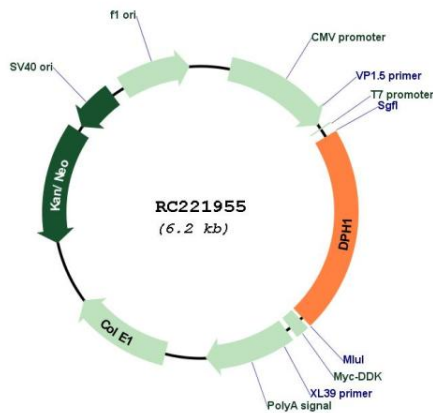
**Cytogenetics:** 17p13.3

**Domains:** Diphthamide\_syn

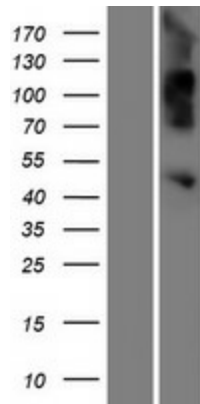
**MW:** 48.6 kDa

**Gene Summary:** The protein encoded by this gene is an enzyme involved in the biosynthesis of diphthamide, a modified histidine found only in elongation factor-2 (EEF2). Diphthamide residues in EEF2 are targeted for ADP-ribosylation by diphtheria toxin and Pseudomonas exotoxin A. Defects in this gene have been associated with both ovarian cancer and autosomal recessive intellectual disability with short stature, craniofacial, and ectodermal anomalies. [provided by RefSeq, Oct 2016]

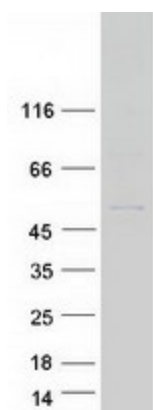
**Product images:**



Circular map for RC221955



Western blot validation of overexpression lysate (Cat# [LY419989]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221955 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified DPH1 protein (Cat# [TP321955]). The protein was produced from HEK293T cells transfected with DPH1 cDNA clone (Cat# RC221955) using MegaTran 2.0 (Cat# [TT210002]).