

## Product datasheet for **KN221955**

### OVCA1 (DPH1) Human Gene Knockout Kit (CRISPR)

#### Product data:

**Product Type:** Knockout Kits (CRISPR)  
**Format:** 2 gRNA vectors, 1 GFP-puro donor, 1 scramble control  
**Donor DNA:** GFP-puro  
**Symbol:** OVCA1  
**Locus ID:** 1801  
**Components:** **KN221955G1**, OVCA1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ATGGCGGCGCTGGTCGTATC  
**KN221955G2**, OVCA1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGGGCGGCCGAGACGGCCC  
**KN221955D**, donor DNA containing left and right homologous arms and GFP-puro functional cassette.

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 TACAGGCATC GTGGTGTAC GCTCGTCGTT TGGTATGGCT TCATTCAGCT CCGGTTCCCA ACGATC

**GE100003**, scramble sequence in pCas-Guide vector

**Disclaimer:**

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

**RefSeq:**

[NM\\_001383](#), [NM\\_001346574](#), [NM\\_001346575](#), [NM\\_001346576](#), [NR\\_144474](#), [NR\\_144475](#), [NR\\_144476](#)

**UniProt ID:**

[Q9BZG8](#)

**Synonyms:**

DPH2L; DPH2L1; OVCA1

**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:

