

## Product datasheet for **KN221861**

### ABCA1 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:       | ABCA1  |
| Locus ID:     | 19   |
| Components:   | <p><b>KN221861G1</b>, ABCA1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CTTGGGTTTTTCAGCAGCGG</p> <p><b>KN221861G2</b>, ABCA1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: AGAAGACAAACAGTAAGCTT</p> <p><b>KN221861D</b>, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p> |

#### 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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AAGGCGAGTT ACATGATCCC CCATGTTGTG CAAAAAAGCG GTTAGCTCCT TCGGTCCTCC GATCGTTGTC
AGAAGTAAGT TGGCCGCAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
CATCCGTAAG ATGCTTTTCT GTGACTGGTG AGTACTCAAC CAAGTCATTC TGAGAATAGT GTATGCCGGC
ACCGAGTTGC TCTTGCCCGG CGTCAATACG GGATAATACC GCGCCACATA GCAGAATTTT AAAAGTGCTC
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ACAGGCATCG TGGTGTACG CTCGTCGTTT GGTATGGCTT CATTACGCTC CGTTTCCCAA CGATC

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**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\\_005502](#)

**UniProt ID:**

[O95477](#)

**Synonyms:**

ABC-1; ABC1; CERP; HDLDT1; TGD

**Summary:**

The membrane-associated protein encoded by this gene is a member of the superfamily of ATP-binding cassette (ABC) transporters. ABC proteins transport various molecules across extra- and intracellular membranes. ABC genes are divided into seven distinct subfamilies (ABC1, MDR/TAP, MRP, ALD, OABP, GCN20, White). This protein is a member of the ABC1 subfamily. Members of the ABC1 subfamily comprise the only major ABC subfamily found exclusively in multicellular eukaryotes. With cholesterol as its substrate, this protein functions as a cholesterol efflux pump in the cellular lipid removal pathway. Mutations in both alleles of this gene cause Tangier disease and familial high-density lipoprotein (HDL) deficiency. [provided by RefSeq, Sep 2019]

Product images:

