

## Product datasheet for **KN300934**

### Adrb2 Mouse 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:** Adrb2  
**Locus ID:** 11555  
**Components:** **KN300934G1**, Adrb2 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAACGACAGCGACTTCTTGC  
**KN300934G2**, Adrb2 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: ACCACGACGTCACTCAGGAA  
**KN300934D**, 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

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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\\_007420](#)

**UniProt ID:**

[P18762](#)

**Synonyms:**

Adrb-2; Badm; Gpcr7

**Summary:**

This intronless gene belongs to the G-protein-coupled receptor superfamily, which includes transmembrane proteins that play a role in signal transduction across biological membranes resulting in a variety of physiological responses. The encoded protein is a beta-2 adrenergic receptor which is activated by catecholamine ligands such as adrenaline and epinephrine. The protein participates in the classical signaling pathway involving G protein, adenylyl cyclase, cAMP (3'-5'-cyclic adenosine monophosphate) and protein kinase A (PKA). In humans, this gene is implicated in susceptibility to nocturnal asthma, obesity and type 2 diabetes. [provided by RefSeq, Apr 2013]

Product images:

