

Product datasheet for KN301804BN

Atp6ap1 Mouse Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 mBFP-Neo donor, 1 scramble control

Donor DNA: mBFP-Neo Symbol: Atp6ap1 Locus ID: 54411

KN301804G1, Atp6ap1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) Components:

KN301804G2, Atp6ap1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN301804BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

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 018794, NM 001358375, NM 001358380

UniProt ID: Q9R1Q9

Synonyms: 16A; AC45; Al316502; Atp6ip1; Atp6s1; AW108110; C7-1; CF2; mFLJ00383; VATPS1; XAP-3

Summary: Accessory subunit of the proton-transporting vacuolar (V)-ATPase protein pump, which is

> required for luminal acidification of secretory vesicles. Guides the V-type ATPase into specialized subcellular compartments, such as neuroendocrine regulated secretory vesicles or the ruffled border of the osteoclast, thereby regulating its activity. Involved in membrane trafficking and Ca(2+)-dependent membrane fusion. May play a role in the assembly of the Vtype ATPase complex. In aerobic conditions, involved in intracellular iron homeostasis, thus triggering the activity of Fe(2+) prolyl hydroxylase (PHD) enzymes, and leading to HIF1A hydroxylation and subsequent proteasomal degradation (By similarity).[UniProtKB/Swiss-Prot

Function]



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Product images:

Donor Vector Edited Chromosome



RFP, Luc, and mBFP will be under native gene promoter