

Product datasheet for KN301804RB

Atp6ap1 Mouse Gene Knockout Kit (CRISPR)

Product data:

OriGene Technologies, Inc.

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Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 RFP-BSD donor, 1 scramble control
Donor DNA:	RFP-BSD
Symbol:	Atp6ap1
Locus ID:	54411
Components:	 KN301804G1, Atp6ap1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) KN301804G2, Atp6ap1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) KN301804RBD, donor DNA containing left and right homologous arms and RFP-BSD 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:	<u>NM 018794, NM 001358375, NM 001358380</u>
UniProt ID:	<u>Q9R1Q9</u>
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 V-type 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:



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

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