

Product datasheet for **KN200394**

ATP6AP1 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:	ATP6AP1
Locus ID:	537
Components:	<p>KN200394G1, ATP6AP1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCGACGGCTCGAGTGCGGAT</p> <p>KN200394G2, ATP6AP1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCTGCCGGTGTTCCTGTCGT</p> <p>KN200394D, 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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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_001183](#)

UniProt ID:

[Q15904](#)

Synonyms:

16A; Ac45; ATP6IP1; ATP6S1; CF2; VATPS1; XAP-3; XAP3

Summary:

This gene encodes a component of a multisubunit enzyme that mediates acidification of eukaryotic intracellular organelles. Vacuolar ATPase (V-ATPase) is comprised of a cytosolic V1 (site of the ATP catalytic site) and a transmembrane V0 domain. V-ATPase dependent organelle acidification is necessary for such intracellular processes as protein sorting, zymogen activation, and receptor-mediated endocytosis. The encoded protein of this gene may assist in the V-ATPase-mediated acidification of neuroendocrine secretory granules. This protein may also play a role in early development. [provided by RefSeq, Aug 2013]

Product images:

