

Product datasheet for KN200394LP

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ATP6AP1 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type: Knockout Kits (CRISPR)

Format: 2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control

Donor DNA: Luciferase-Puro

Symbol: ATP6AP1

Locus ID: 537

Components: KN200394G1, ATP6AP1 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002)

KN200394G2, ATP6AP1 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002)

KN200394LPD, donor DNA containing left and right homologous arms and Luciferase-Puro

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 001183</u> **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

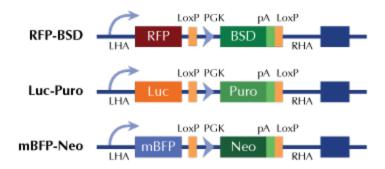
protein may also play a role in early development. [provided by RefSeq, Aug 2013]





Product images:

Donor Vector Edited Chromosome



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