

Product datasheet for **KN201009**

Sodium Potassium ATPase (ATP1A1) 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:	Sodium Potassium ATPase
Locus ID:	476
Components:	<p>KN201009G1, Sodium Potassium ATPase gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTGAGTGTCCGGCGCGCCCG</p> <p>KN201009G2, Sodium Potassium ATPase gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GGAAGTCGGGAGGGCGACCG</p> <p>KN201009D, 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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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_000701](#), [NM_001001586](#), [NM_001160233](#), [NM_001160234](#)

UniProt ID:

[P05023](#)

Synonyms:

MGC3285; MGC51750

Summary:

The protein encoded by this gene belongs to the family of P-type cation transport ATPases, and to the subfamily of Na⁺/K⁺-ATPases. Na⁺/K⁺-ATPase is an integral membrane protein responsible for establishing and maintaining the electrochemical gradients of Na and K ions across the plasma membrane. These gradients are essential for osmoregulation, for sodium-coupled transport of a variety of organic and inorganic molecules, and for electrical excitability of nerve and muscle. This enzyme is composed of two subunits, a large catalytic subunit (alpha) and a smaller glycoprotein subunit (beta). The catalytic subunit of Na⁺/K⁺-ATPase is encoded by multiple genes. This gene encodes an alpha 1 subunit. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2009]

Product images:

