

Product datasheet for KN201009BN

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Sodium Potassium ATPase (ATP1A1) Human 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: Sodium Potassium ATPase

Locus ID: 476

Components: KN201009G1, Sodium Potassium ATPase gRNA vector 1 in pCas-Guide CRISPR vector

(GE100002), Target Sequence: GTGAGTGTCCGGCGCCCCG

KN201009G2, Sodium Potassium ATPase gRNA vector 2 in pCas-Guide CRISPR vector

(GE100002), Target Sequence: GGAAGTCGGGAGGCGACCG

KN201009BND, donor DNA containing left and right homologous arms and mBFP-Neo

functional cassette.

GE100003, scramble sequence in pCas-Guide vector

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:

Donor Vector Edited Chromosome



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