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Product datasheet for KN209021

ADCY6 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: ADCY6

Locus ID: 112

Components: **KN209021G1**, ADCY6 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GTTCGCGGCGCCGTGGCACT
KN209021G2, ADCY6 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: CAGCCTGGGGTGAACGCAAT
KN209021D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.
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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TGGGGGATCA TGTAACTCGC CTT

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.

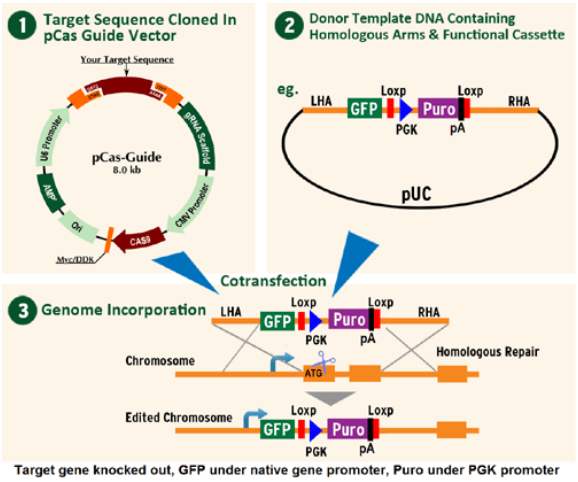
RefSeq: NM_015270, NM_020983

UniProt ID: O43306

Synonyms: AC6; LCCS8

Summary: This gene encodes a member of the adenylyl cyclase family of proteins, which are required for the synthesis of cyclic AMP. All members of this family have an intracellular N-terminus, a tandem repeat of six transmembrane domains separated by a cytoplasmic loop, and a C-terminal cytoplasmic domain. The two cytoplasmic regions bind ATP and form the catalytic core of the protein. Adenylyl cyclases are important effectors of transmembrane signaling pathways and are regulated by the activity of G protein coupled receptor signaling. This protein belongs to a small subclass of adenylyl cyclase proteins that are functionally related and are inhibited by protein kinase A, calcium ions and nitric oxide. A mutation in this gene is associated with arthrogryposis multiplex congenita. [provided by RefSeq, May 2015]

Product images:



Target gene knocked out, GFP under native gene promoter, Puro under PGK promoter