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

Product datasheet for KN202074

PAM 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: PAM

Locus ID: 5066

Components: **KN202074G1**, PAM gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GAACTAGCAGGCTAGGGACG
KN202074G2, PAM gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GCCCACTTTCTGTCTTTAAG
KN202074D, 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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TACAGGCATC GTGGTGTCAC 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.

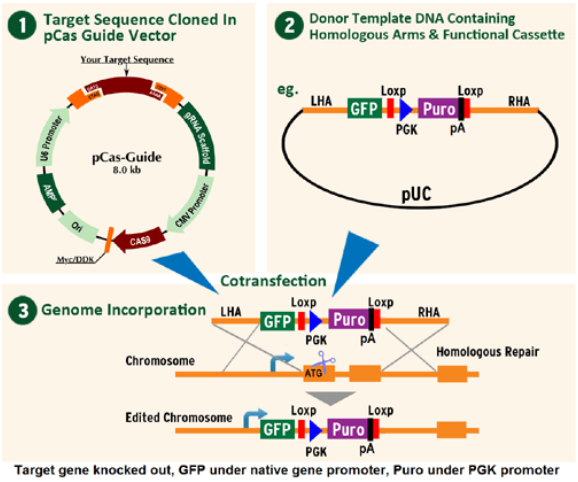
RefSeq: NM_000919, NM_001177306, NM_001319943, NM_138766, NM_138821, NM_138822, NR_033440, NM_001364582, NM_001364584, NM_001364586, NM_001364588, NM_001364589, NM_001364590, NM_001364593, NM_001364583, NM_001364585, NM_001364587, NM_001364591, NM_001364592, NM_001364594, NR_157231

UniProt ID: P19021

Synonyms: PAL; PHM

Summary: This gene encodes a multifunctional protein. The encoded preproprotein is proteolytically processed to generate the mature enzyme. This enzyme includes two domains with distinct catalytic activities, a peptidylglycine alpha-hydroxylating monooxygenase (PHM) domain and a peptidyl-alpha-hydroxyglycine alpha-amidating lyase (PAL) domain. These catalytic domains work sequentially to catalyze the conversion of neuroendocrine peptides to active alpha-amidated products. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Jan 2016]

Product images:



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